March-April 1981

Infantry

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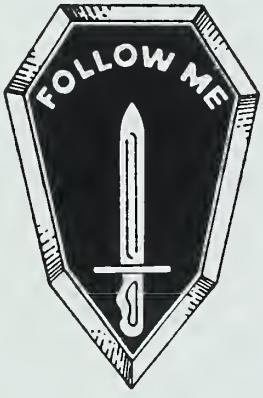

Infantry

March-April 1989 Volume 79, Number 2

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Commandant's NOTE

MAJOR GENERAL MICHAEL F. SPIGELMIRE Chief of Infantry

FM 25-100, TRAINING THE FORCE

The Chief of Staff of the Army, General Carl E. Vuono, on 15 November 1988 approved Field Manual 25-100, Training the Force. He personally distributed copies of the manual to all of his corps and division commanders and then spent three days discussing it with them.

The manual provides the authoritative foundations for planning, executing, and assessing training at the individual, leader, and unit levels. Our leaders must understand the importance of training as they will fight. Accordingly, the central concept of this manual is "battle focus," which is the process of deriving a unit's peacetime training requirements from its wartime missions. The commander's analysis of missions or contingency operations and external directives generates a mission essential task list (METL). He then focuses his training programs on the critical wartime tasks that his unit must be able to perform.

The remainder of FM 25-100 contains details on how to plan, prepare, execute, and assess training. Our training must be doctrinally correct, must be performance oriented, and must have measurable standards. Most significantly, we must put our efforts into training to a high standard the critical tasks and skills—both collective and individual—that will ensure victory on the battlefield.

We at the Infantry School recognize that the foundation for good training begins with incorporating these critical training fundamentals into our core leader courses. We accomplish this through a practical hands-on approach to training management instruction and the accompanying training literature. The approach and the literature are reflected in our training management model of instruction, and in our updated Mission Training Plans (MTPs) and Soldier's Manuals, which support the commander's METL and battle focus process.

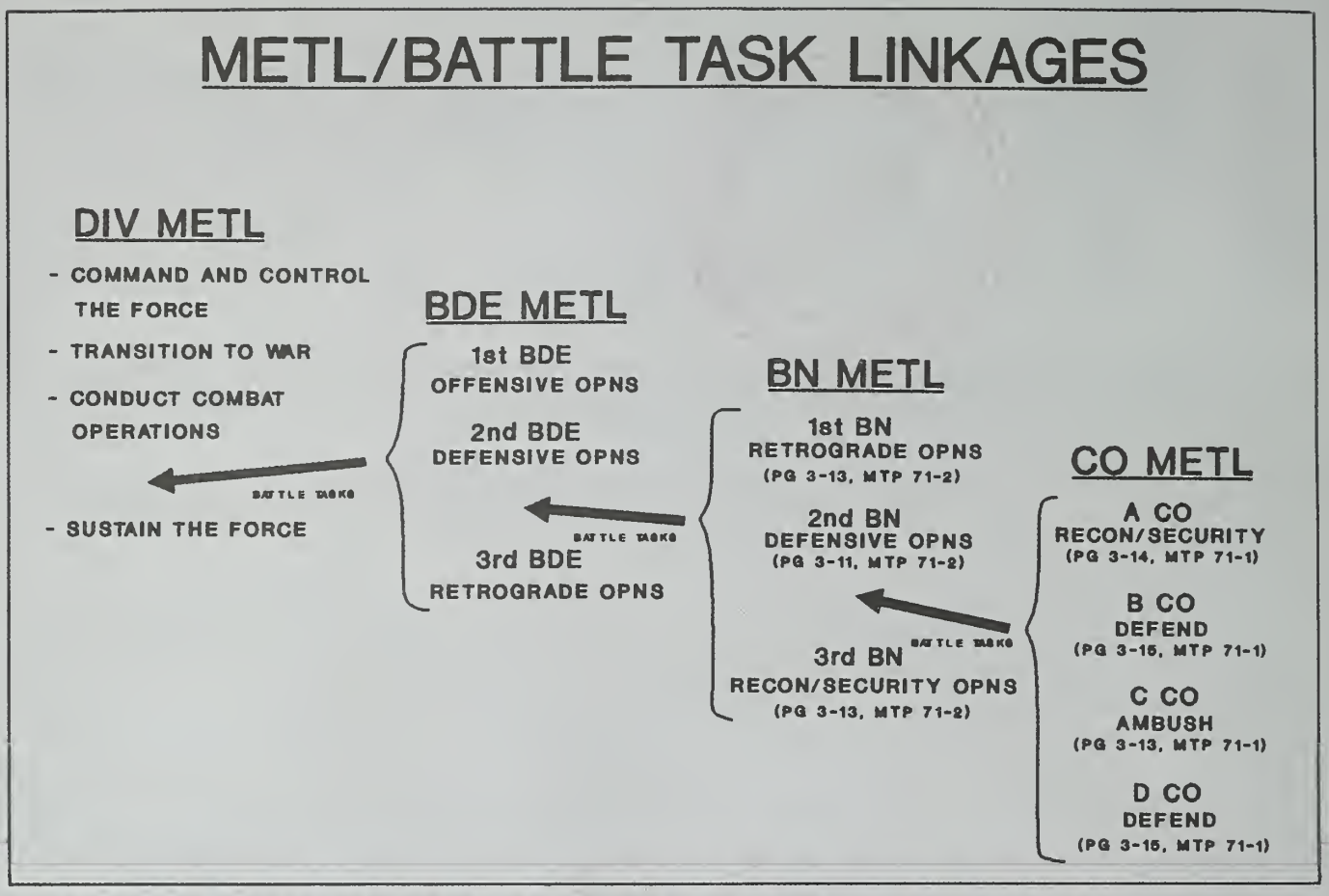
To embed FM 25-100 into the leadership courses at the Infantry School, we developed an Infantry Officer Advanced Course (IOAC) model that teaches students the concepts of battle focus, METL development, and training assessment. Each officer is taught how to put together training exercises that are based on his unit's METL and its training needs. After receiving the normal tactical instruction, a student then designs a situational training exercise (STX) to use in training a simulated unit on a tactical operation. This requirement forces the student to use the MTPs and operations outlines to plan an STX. The model, used in IOAC classes since March 1988, is a sound approach to ensuring that our leaders know how to train their units to fight.

We have taken a similar approach with the Infantry Officer Basic Course (IOBC) and the Advanced NCO Course (ANCOC). In these two courses, in addition to their classroom instruction, students develop and execute STXs on the ground. This approach to instruction has the added value of producing leaders who are certified, not only in the critical leader tasks they must perform, but also in training their units to accomplish their critical collective tasks.

An important aspect of this training is the emphasis we place on the role of noncommissioned officers in ensuring that a unit's individual training tasks support its collective mission essential tasks.

The final and perhaps most significant initiative we have taken in support of FM 25-100 has been to completely revise MTPs and Soldier's Manuals. These products are vital links in the training development process and must be fully understood before they can be properly used. They provide the linkage of critical tasks from brigade to individual level. The bridge between the two sets of manuals is the task matrix found in Chapter 2 of each MTP.

The MTPs list both the critical wartime mission outlines and the training evaluation outlines (TEOs) for the

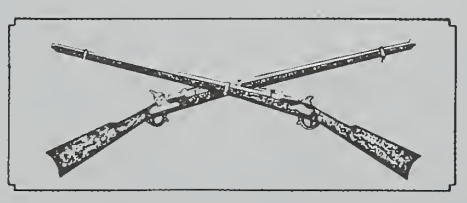


collective tasks. The MTPs are linked both vertically and horizontally to support the unit training needed to accomplish mission essential tasks. The accompanying diagram shows an example of a unit METL from division to company level. At each level, the METL tasks are supported by the critical operations found in the appropriate MTP (shown in parentheses).

MTP 7-8 contains the critical wartime operations and collective tasks for all infantry squads and platoons, mounted and dismounted. MTPs 7-10, 7-20, and 7-30 tie together the critical operations and collective tasks for dismounted units from company level through brigade level. MTPs 71-1, 71-2, and 71-3, which have been produced jointly with the Armor School at Fort Knox, link the operations and tasks for mounted units from company team level through heavy brigade level. Each echelon manual is linked horizontally with its counterpart manual to ensure the standardization of training throughout the force. Collectively, the manuals facilitate multi-echelon, combined arms training programs to achieve and sustain wartime proficiency.

A unit's individual training program supports its collective program, and the Soldier's Manuals provide the individual tasks, conditions, and standards that support the collective tasks. As the commander establishes the collective tasks to be trained, the NCO leaders—from the command sergeant major to the squad leaders—select the individual tasks that support the unit's METL. All leaders must support the NCOs' role in developing and sustaining individual soldier skills.

The Infantry School has made tremendous strides in linking its individual and collective training products, and all of our MTPs and Soldier's Manuals are now published and in distribution. These manuals will greatly aid commanders as they plan and execute their units' training programs as envisioned in FM 25-100. They describe a training plan that is flexible enough to permit units to conduct training that is tailored to their specific needs, but a plan that is still detailed enough to foster sound standards and a desirable level of training standardization.



INFANTRY LETTERS

COUNTERARGUMENT

Although there are innumerable lessons to be learned from history, "Helpful Hints to Hopeful Heroes" (INFANTRY, November-December 1988, pp. 29-32) contains what I believe to be misleading advice for today's combat arms soldiers. An editorial note forewarning the reader of major differences between today's training techniques and doctrine and those of the past would have made good sense.

For example, Generals Jacob Devers and George Patton may have preached the benefits of "marching fire," "ridiculing those suffering from battle fatigue," and "tanks used as artillery" in 1946. But this advice has no place in today's professional literature. We would be better served if INFANTRY featured the lessons learned by the Israeli army in dealing with stress casualties or by a more technical view explaining that today's main battle tankers do not train for indirect fire missions.

Today's weapon systems need to be used to their fullest potential. The use of "marching fire" and of "tanks as close artillery" undermines these capabilities and makes for dumb tactics.

I did enjoy most of this article.

JOHN N. LESKO, JR.
CPT, Armor
Watertown, Massachusetts

AMBUSH

This letter is in response to "Platoon Live Fire Ambush," by Lieutenant Chris G. Pappas (INFANTRY, May-June 1988, pp. 40-42) and Captain David Walter's letter on the same subject (November-December 1988, p. 4).

Lieutenant Pappas says that in one training exercise, machineguns, even when mounted on a tripod, weren't as effective in covering the kill zone as one would expect. Machineguns should be sited to enfilade the target (fire along the long axis) whenever possible. The ideal way to do this is to position the gun in the short leg of an "L-shaped" ambush. Lieutenant Pappas's target array prevented this, since a gun so sited would have endangered the people handling the target array. That's not a criticism, just a point that should be remembered when drawing lessons from training exercises—sometimes safety considerations affect the outcome.

Captain Walter says that a claymore is not the proper weapon to use in initiating an ambush. I beg to differ! I know of only one weapon that even approaches the claymore, and that's the old "soda straw," the M67 90mm recoilless rifle with canister.

The success of an ambush is directly proportionate to the number of casualties inflicted by the first shot. Units that use shouts, whistles, or pistol shots to initiate ambushes usually find out rather quickly the error of their ways. Even rifle fire can be ineffective—as any hunter who has ever had "buck fever" can testify.

The ultimate ambush-initiating weapon would be one that kills the entire enemy party instantaneously. The claymore comes close to filling the bill here. We often used several claymores sited to thoroughly cover the kill zone (use a 10-cap blasting machine, not a clacker, to set them off). Because any survivors will run away from the blasts, claymores provide an added benefit—they can be positioned so that they drive the survivors deeper into the kill zone, thus increasing the effectiveness of other weapons.

In areas where we had successfully used mechanical ambushes (claymores with trip wires), we found that using claymores alone (without small arms fire) worked quite well—survivors would think the point had hit another mechanical ambush and would go for help. The rescue party would come up (often easily visible, since they carried kerosene lamps made from empty cartridge cases), and they in turn would be ambushed.

VERNON HUMPHREY
MAJ, Retired
Seaford, Virginia

CROSSED MUSKETS

Reference "The Crossed Muskets," by Second Lieutenant J.C. Kaskie, reprinted in your November-December 1988 issue (page 3), the article does not mention the "problem" of which musket, right or left, should be depicted overlying the other.

Captain J.M. McDuff in *United States Army Officer's Collar Insignia: 1902-1976* (J. Watson, P.O. Box 33, Steelville, MO 65565), depicts a left-over-right arrangement (with one exception) for our branch insigna. This was in response to a new and revised "General Regulation" on the U.S. Army Uniform (see General Order #81 dated 17 July 1902). In 1907 the present "switch" to right over left occurred. McDuff's book depicts this change but does not provide the reasons for it.

Which is legitimate in terms of heraldry? Right over left or left over right?

TERRY W. HARMON
MAJ, Infantry, USAR
Granite City, Illinois

EDITOR'S NOTE: Major Harmon's question was referred to the Army's Institute of Heraldry, and the following is the Institute's reply:

Since its introduction in 1875 there have been several versions of the Infantry Insignia of Branch. Apparently due to lack of specifications, illustrations, or

descriptions, the insignia was manufactured either way (left over right or right over left) depending upon the manufacturer of the item.

The correct insignia is the one with the right musket over the left.

The Institute of Heraldry initiated a quality assurance program in the late 1950s to ensure, among other things, that insignia were manufactured from a standard design. Additionally, manufacturers of items worn on the uniform must borrow the tools from the Army, thereby assuring uniformity.

The principles of heraldry state that the object "in bend" (right) surmounts that "in bend sinister" (left side) when objects are crossed. This is qualified, however, with the statement "unless otherwise stated." It is not an ironclad rule but rather a guideline. Generally, this guideline is followed by this Institute.

ROBERT F. BAKER
COL, U.S.A.
Institute of Heraldry
Cameron Station, Virginia

SOUNDS AND WEATHER

I am studying two aspects of battlefield experience—sounds and weather—and would appreciate hearing from anyone who has been in combat, or from military history buffs who have been there in spirit.

I am seeking succinct word pictures, vignettes, or re-creations from any source, professional or private, as experienced from a sensory point of view.

What did you hear when facing the enemy? Include vivid descriptions of foreground sounds—the combatants themselves (human reactions, conversation, exclamations, personal reactions) under fire and during lulls; or background sounds—the battle itself (activities of your own and enemy ground-sea-air weapon systems, the enemy himself, weather, animal-bird-insect-plant life).

What was the weather like before, during, or after specific battles (temperature, sky condition, wind, humidity, precipitation)? Please include the date and time of day.

I am also interested in notable published accounts depicting "battle sounds" and "battle weather," regardless of who, when, and where.

When I receive enough meaningful input, I will be able to compile an overall paper on these findings and will include the names of contributors on the mailing list.

Please write to me at 140-10 Franklin Avenue (B44), Flushing, NY 11355-2626.

MICHAEL J. MOONEY

4th BATTALION, 18th INFANTRY

On 19 June 1989, the 1st Battalion, 48th Infantry is scheduled to be redesignated the 4th Battalion, 18th Infantry. We are therefore looking for photographs, stories, or historical data readers may have pertaining to the 4th Battalion, 18th Infantry.

The contributions should be sent to Commander, 1st Battalion, 48th Infantry, ATTN: 1LT Gaal, APO New York 09091. Any questions may be directed to Lieutenant Gaal at 011-49-6051-696/818.

DAVID H. STAPLETON
1LT, Infantry

REUNION OF 33d INFANTRY DIVISION

Veterans of all the units that served in the 33d Infantry Division (World Wars I and II) will gather 27 September to 1 October 1989 in Indianapolis, Indiana, at the Hilton Hotel.

For information contact me at P.O. Box 532, Kirkland, WA 98083-0532; telephone (206) 822-4000 or 745-0252.

BILL ENDICOTT
Convention Chairman

REUNION OF BIG RED ONE

The Society of the First Division, which is composed of men who served in World War I, World War II, Vietnam, and in peacetime, will hold its 71st Annual Reunion 2-6 August 1989 in Colorado Springs, Colorado.

For information, contact me at 5 Montgomery Avenue, Philadelphia, PA 19118.

ARTHUR L. CHAITT
Executive Director

HAVEN FOR ENLISTED PERSONNEL

The Soldiers', Sailors' and Airmen's Club in New York City, a few blocks from the Empire State Building, is available to enlisted personnel from all branches of service. It is also open to cadets from the U.S. Military Academy and midshipmen from the U.S. Naval Academy. One floor is specifically reserved for female personnel. The charge is $20 a night.

Support for the club, a non-profit organization, depends upon contributions from the public sector.

Enlisted personnel may call for reservations, 24 hours a day, at (212) 683-4353. Spouses and children over the age of 12 are also welcome.

PHILIP A. SERPICO
Executive Director

PHOTOGRAPHS NEEDED

The Command and Staff Department, U.S. Army Armor School, is in the process of establishing a photographic display of current armor battalion/cavalry squadron and heavy brigade/cavalry regiment commanders.

We need current 8X10 color photographs of infantry colonels, in Class A uniform, who command heavy brigades with at least one armor battalion assigned.

Photographs should be sent to Professional Development Division, USAARMS, ATTN: ATSB-CS-PDD-T, Fort Knox, KY 40121-5211.

MELVIN J. LITTIG
LTC, U.S.A.

INFANTRY NEWS

THE FIRST M24 SNIPER rifles were released late last year to the John F. Kennedy Special Warfare Center at Fort Bragg. Thirty-six of the new weapon systems were in the first package.

The M24 is the first system developed specifically to fill the sniper role. It is to be employed as a force multiplier in low and high intensity conflicts where U.S. forces are outnumbered on the battlefield. It will be used to engage with precision fire specific targets that are beyond the effective range of standard issue rifles.

Unlike its predecessor, the M21, it can be maintained by the operator, it has a backup sighting system, and it incorporates many other characteristics that significantly increase its reliability as a combat weapon.

The M21, a modified M14 semi-automatic rifle, cannot be maintained under field conditions, and its inflexible design makes it highly susceptible to malfunction. For example, the M21's scope cannot be removed by the operator. If anything happens to it, it has to be sent to Anniston Army Depot for repairs. In addition, its barrel-receiver group is bedded in a fiberglass epoxy material that only an armorer or a gunsmith can rebed. By contrast, the M24's free-floating barrel rests on an aluminum bedding system that is an integral part of the stock.

The scope on the M21 was often damaged in parachute jumps, while the M24's detachable scope can be packed in a jumper's rucksack for protection.

The bolt-action rifle, similar to the Remington Model 700 sold in the private sector, has an 800-meter range and has an adjustable stock and trigger pull. The scope has a mil dot reticle pattern and comes equipped with a sunshade. When reattached to the rifle, the sight can be repositioned (zeroed) within one-half minute of angle. In addition, the new system has backup metallic front and rear sights that can be used if the scope is damaged. These iron sights have their own case.

Like the M21, the M24 fires the standard 7.62mm M118 military cartridge. Because of its long action, though, the M24 can easily be modified to accommodate a round size up to .300 magnum.

M24 SNIPER WEAPON SYSTEM (SWS)

The rifle also comes with a detachable bipod, a five-round internal magazine, and a standard issue leather sling. The rifle itself weighs about 11.6 pounds and is 43 inches long when the stock is in its shortest position. With its various repair and carrying equipment, its overall weight is about 14.2 pounds.

Special operations, Ranger, and other light infantry units will receive most of these first systems.

A FOG-M CONTRACT has been awarded for the full-scale development of the missile system. The FOG-M (fiber optic guided missile) is the non-line-of-sight portion of the Army's Forward Area Air Defense System (FAADS), a five-part program to improve battlefield air defense for the Army's divisions.

FOG-M gets its name from the spool of optical fiber that pays out behind when the missile is fired. Launched vertically, the missile pitches over into level flight. Images from a tiny video camera in the nose are transmitted back to the gunner's station where a soldier, looking at a TV-like screen, can guide the missile and hit targets hidden behind hills, lines of trees, and the like.

When fielded in the early 1990s, the FOG-M will enable Army gunners to attack and destroy, for the first time, enemy helicopters and armored vehicles that are masked by the terrain or hidden from their line of sight.

FOG-M will be deployed with the Army's light and heavy divisions.

A SOLAR PANEL, a hand- or foot-cranked generator, and a thermoelectric generator are being considered as alternative electrical power sources for the Special Operations forces. These power sources are strictly for communications systems.

The candidate sources are designed for use with future high-energy density, battery types such as rechargeable lithium, and with nickel cadmium rechargeable batteries such as the BB-542. Each source has certain advantages in different scenarios.

The 60-watt solar panel can fully charge a BB-542 battery in less than two hours under bright sun. It can be connected in parallel to other solar panels and compactly folded up for transport.

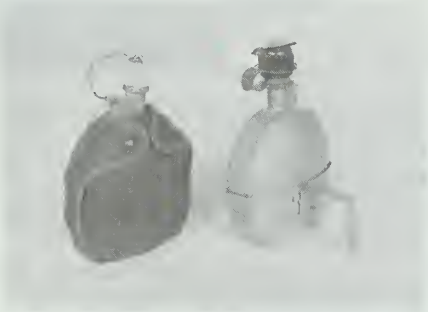
The man-operated generator can recharge the BB-542 in less than 75 minutes. The user can sit on an attachment and crank the generator with both hands, or attach a foldable component to a tree trunk for foot or hand cranking.

The thermoelectric generator converts heat into electrical energy. Thus, these modules can use heat from a camp stove to charge the BB-542 battery in less than five hours while the stove also keeps the troops warm, cooks their meals, and melts snow.

Each of these power sources is silent, weighs less than five pounds, and can operate in average worldwide temperature and sunlight conditions. Two of the three are non-developmental items.

AN ADAPTER KIT has been devel-

oped for the insulated canteen that will make it compatible with "through the mask drinking" in a chemical/biological toxic environment.



Canteens are shown before (left) and after (right) modifications.

The kit contains a new cap, strap, mouthpiece adapter, epoxy adhesive, razor blade, emery cloth, an alcohol wipe packet, and an instruction sheet. Soldiers will use these components to make on-the-spot modifications.

THE NATIONAL INFANTRY Museum is now restructuring a section covering the U.S. infantry in the 19th Century. Part of the new look will be large, colorful illustrations depicting uniforms and equipment as regulations changed during that period.

One of the artifacts included is the Pennsylvania 1797 contract musket, caliber .69, Charleville pattern. The state of Pennsylvania became alarmed over worsening relations with Britain and France in the latter part of the 1790s, and on 28 March 1797 authorized the purchase of 20,000 of the muskets at a cost of $10.25 each with which to arm its militia, the first state ever to do so. The barrels were 44 inches long, to which bayonets with 15-inch blades could be fitted. The stocks were made of well-seasoned walnut.

A noncommissioned officer's sword of 1790-1800 is shown. The NCO swords for the years after the Revolution were not rigidly specified. The blade was for cutting, and it was to be at least one inch in width and about 30 inches in length. The blade on the one shown is slightly curved, and the grip is made of bone, but some grips were made of horn. An NCO sword, model of 1840, is also on display. Although the war with Mexico saw the bayonet replacing the sword as a weapon for use by the infantry, NCOs were issued the model of 1840 for use both as a weapon and as a symbol of rank. This model remained in use for 70 years.

A sword for general officers and their staffs that was adopted in 1832 is part of the exhibit, too. It was the standard weapon until 1850, after which the newer models of 1850 and 1860 became more popular. Another infantry officer's sword in the collection is a straight bladed one that conforms to the uniform regulation of 1821. The grip is carved from bone with a brass eagle head on top.

Noncommissioned officer's sword

An interesting leather headdress is on display. The bell crown cap was first authorized for infantrymen in April 1820. All company officers were required to wear this new cap, a style already in use by European armies, when on duty with their companies. All enlisted men were required to wear it also. Tall caps gave the appearance of greater height to soldiers on the battlefield and were the military fashion of the 1820-1830 period.

Also on display is a duffel bag that was carried by General Franklin Pierce in the War with Mexico. Pierce, who later became the 14th president of the United States, enlisted as a private in 1846 when war broke out with Mexico. He was soon commissioned in the 9th Regiment and only months later was promoted to brigadier general. He marched with General Winfield Scott to Mexico City.

A number of uniform pieces and equipment from the War of 1812 and the War with Mexico are on display, as is a large collection of Civil War artifacts that was described in an earlier issue of INFANTRY (July-August 1988).

A U.S. .54 caliber Model 1836 flintlock pistol made by A.H. Waters and Company and used in the Mexican War is included in this section. These were the last U.S. martial pistols to be made with the flintlock ignition system. Many were later converted to the percussion system and used in the Civil War.

The National Infantry Museum Society, formed at Fort Benning a number of years ago to assist the museum with financial and volunteer support, is open to anyone who is interested in joining. The cost is $2.00 for a one-year membership or $10.00 for a lifetime membership.

Additional information about the museum and the society is available from the Director, National Infantry Museum, Fort Benning, GA 31905-5273; AUTOVON 835-2958 or commercial (404) 545-2958.

PROFESSIONAL FORUM

Counter-Reconnaissance Planning

LIEUTENANT DANIEL THOMAS

The Soviet Army recognizes the fact that fast-paced, high-tempo offensive operations require an aggressive reconnaissance effort. This effort takes on a definite combined arms flavor with the employment of fixed-wing and rotary aircraft, chemical and radiological reconnaissance, artillery target acquisition units, engineers, and radio intercept and direction finding—not to mention the numerous ground elements bent on seeking out information necessary for them to formulate and confirm their operations plan. The Soviets recognize how critical this effort is to their operations and therefore devote a great number of resources to its execution. That effort bears fruit.

One lesson that has been learned from the battles fought at the National Training Center (NTC) is that a successful reconnaissance of a defending force leaves it practically naked to a numerically superior foe. A corollary of this is that surprise is just as important in the defense as it is in the attack, if not more so. If a unit's lack of effort, resources, planning, or execution allows the enemy's reconnaissance forces to succeed, that enemy commander can then plan his attack with what amounts to his opponent's operations order. If a friendly force succeeds in defeating the OPFOR reconnaissance units, however, the OPFOR commander will have only a foggy and incomplete intelligence picture on which to base his plan. Denying the enemy any essential elements of friendly information has an important if not critical effect on the outcome of any battle.

The S-2 usually has the primary responsibility for planning the counter-reconnaissance battle; he does this by closely coordinating his actions with and working under the direction of the battalion commander and the S-3. Analyzing the factors that establish the counter-reconnaissance plan is a complex task in which proper organization is essential, and a unit needs to develop a format or an SOP for doing this.

The format presented here, called the combat counter-reconnaissance plan, is designed to provide a relatively quick way to construct a plan through which estimated enemy ground reconnaissance actions can be completely choreographed. Named areas of interest (NAIs) are developed for each enemy action, and a counter-response is planned at each NAI. In sum, it provides a framework within which staff members can plan their counter-reconnaissance operations according to their own tactical preferences.

It is important to understand, though, that this process does not stand apart from a doctrinal intelligence preparation of the battlefield (IPB). Indeed, the products derived from the IPB are essential. Without a good terrain analysis, for example, a counter-reconnaissance plan is doomed to failure. Furthermore, the first step of the plan involves the use of a doctrinal template. In fact, much of this counter-reconnaissance plan is a mirror of the regular IPB tailored to accomplish the necessary mission of defeating the enemy's reconnaissance effort.

The process includes four steps:

Step 1: Identify the Threat. To defeat the enemy's reconnaissance missions, an S-2 needs a picture of what his unit is up against. This is where the doctrinal template comes in. Just as the S-2 makes an estimate of the forces he expects his unit to encounter during its main attack, he does the same for the enemy reconnaissance forces.

The S-2 uses the enemy order of battle, the doctrinal template, and recent reports of enemy activity to make an initial estimate of the force his unit could encounter during the enemy's reconnaissance phase. For example, let's assume a battalion task force is preparing to defend an area that is believed to be in the zone of attack for a motorized rifle regiment. The S-2 must determine what forces the enemy will commit against the task force sector. Using his doctrinal template, he decides that in this situation

the enemy will normally commit the regimental reconnaissance company, two deep reconnaissance teams from the regiment's parent division, and one motorized rifle squad from each motorized rifle battalion.

Of course, the S-2 can and must update this model on the basis of new intelligence reports and his situational template. It is critical, too, that he address the particulars about the enemy force so that a proper response can be planned. The enemy may commit more reconnaissance units, or different types of units, on the basis of the terrain, the mission, and the makeup of the friendly force. If the terrain offers an unusually large water obstacle, for example, the enemy will probably also commit engineer reconnaissance units. As another example, if the S-2 has information that the enemy's reconnaissance company is at only 75 percent strength, or if he receives a report that one of his own task force's companies has just killed an enemy deep reconnaissance team, he will have to adjust his estimate.

Step 2: Identify the Threat's Reconnaissance Plan. Once the S-2 has identified the enemy's reconnaissance units, he must determine what he is going to do with this information. The objective of this step is to get inside the enemy's decision-making cycle and predict what the enemy commander wants to do and how he plans to do it. The S-2 does this by wargaming the enemy's objectives and possible courses of action. If he is successful, he should end up with what amounts to the enemy's reconnaissance operations order.

A tool that will help the S-2 in doing this is the counter-reconnaissance table shown in Figure 1. The table consists of four columns, the first two of which—Time and Action—are used during this step. The phases of the enemy's plan are recorded in the Time column and the enemy's activities during these periods of time in the Action column.

For example, in the first entry in Figure 1, the S-2 believes that enemy deep reconnaissance teams will be observing the task force from inside the task force's sector. He puts this information in the Action column and the time he believes this will occur in the Time column.

TIME	ACTION	NAI	MISSIONS
010730 hrs until the beginning of main battle.	Deep recon teams observe friendly defensive preparations from the depth of sector.	16,17 18,19 20,21 22,10 9	C Co clear NAI 16,17. B Co clear NAI 18,19. A Co clear NAI 20,21. E Co clear NAI 22. Tm Tk clear NAI 9,10. Execute upon entering sector.
010900 hrs until 011300 hrs	Regimental Recon Co pushes forward to establish line or base to conduct operations from and to observe friendly sector. Will attempt to do this as far forward as OP Bone,jumping from OP Tony, Op Casey, and The Whale.	14,9 5,4 8,6 3,2	Scouts and Tm Tk move across FEBA at 0700 and establish a security line as close to FLOT as possible.
011300 hrs to 011800 hrs	Enemy attempts to infiltrate small mounted patrols to use in next stage of his recon plan.	3,4 6,8 9	Scouts and Tm Tk deny any penetration of these NAIs by vehicles.
011800 hrs to 011900 hrs	Enemy attempts to identify friendly force locations using high speed patrols to draw fire and thus identify battle positions.	11,12 13,15	Be prepared to encounter and destroy these vehicles, but engage them from locations other than battle positions. A Co watch NAI 11. B Co watch NAI 12. C Co watch NAI 15. E Co watch NAI 13.
011900 hrs to 012400 hrs	About three squad-sized patrols attempt to move into friendly sector to locate positions, mark routes, and breach obstacles. Patrols should be made up of 1-2 vehicles and dismounted soldiers.	3,4 6,8 9,11 12,13 15	Scouts and Tm Tk observe and target NAIs 3,4,6,8,9, from 011900 to 012400 hrs. Establish ambushes from 012100 to 012400 hrs at: A Co-NAI 11, B Co-NAI 12, C Co-NAI 15, E Co-NAI 13.
011900 hrs to 010400 hrs	GSR assist patrols by verifying locations and warning of approach of friendly security forces.	3,7 8	Scouts and Tm Tk be prepared to spot artillery fire or react physically if GSR locations are identified through friendly EW.
012300 hrs to 020300 hrs	Regimental recon patrols attempt to penetrate into the depth of our sector and conduct deep reconnaissance.	3,4 6,8 9,11 12,13 15	Scouts and Tm Tk observe and target NAIs 3,4,6,8,9, from 012400 to 020300 hrs. Destroy any enemy reconnaissance forces that attempt to penetrate our sector. Maintain observation on NAIs. Be prepared to react to and destroy any enemy infiltration attempt. A Co watch NAI 11, B Co watch NAI 12, C Co watch NAI 15, and E Co watch NAI 13.

Figure 1

Step 3: Terrain Analysis and Selection of NAIs. A terrain and weather analysis is absolutely necessary during this phase of the planning so that the S-2 can predict where the enemy will conduct his actions. The location of possible observation posts (OPs) and infiltration routes can be identified only through a close examination of the terrain and by using all of the available data. This data may include information gathered from ground reconnaissance of the terrain, aerial photographs, or fly-overs using available aviation assets.

Then, the S-2 selects a series of NAIs that correspond with the critical points where the enemy's reconnaissance effort will be located or spotted and, hopefully, killed. For instance, in the second entry in Figure 1, the S-2 expects the enemy's regimental reconnaissance company to

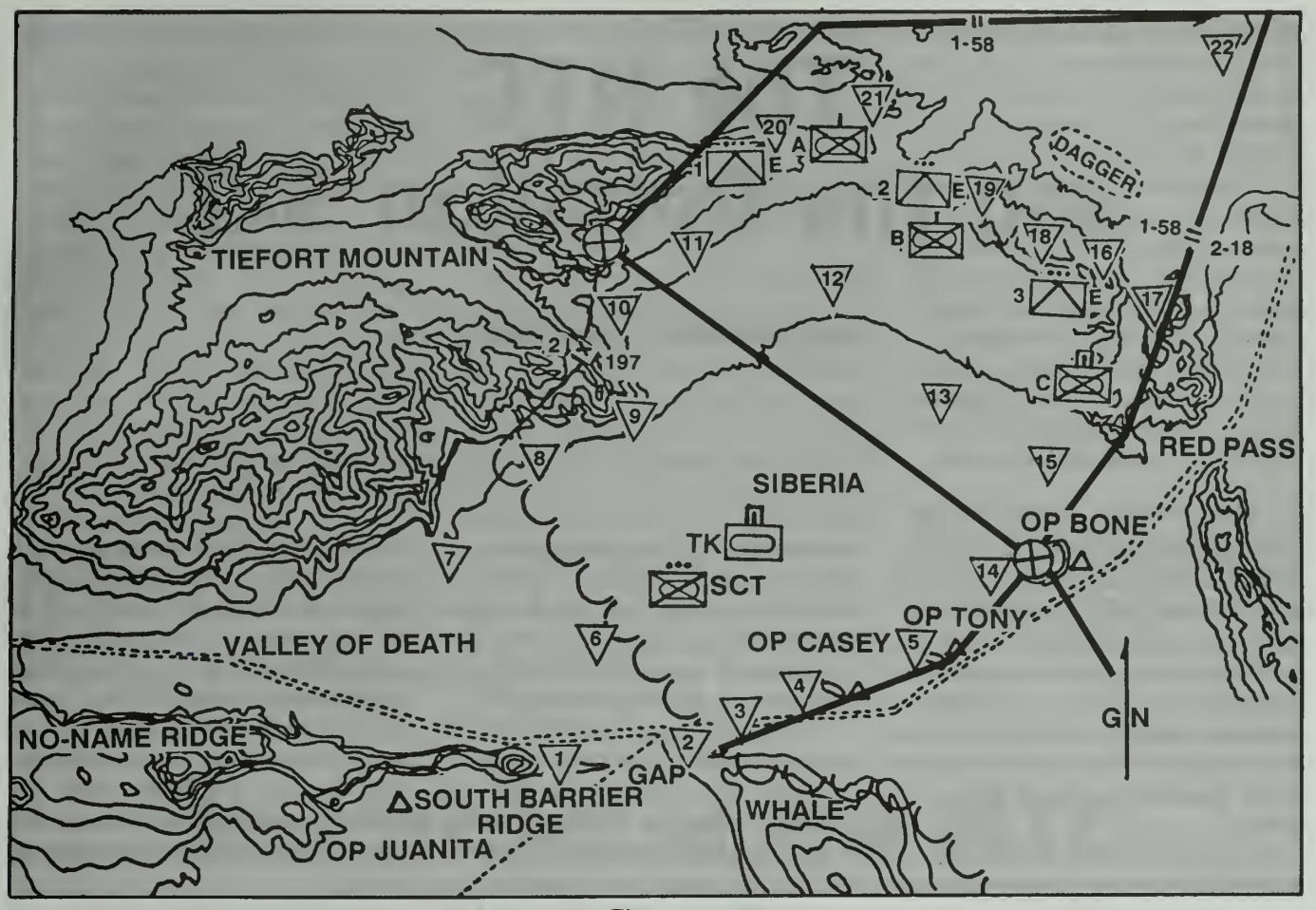


Figure 2

push forward to establish a base and a line of reconnaissance to conduct future operations. Critical locations where this effort is likely to take place are thus marked with NAIs. Or another example, if a suspected infiltration route is identified, as is done in entry five of Figure 1, an NAI should be placed on the route to spot the enemy's penetration efforts.

The placement of these NAIs should correspond with the activities identified in Step 2, and each NAI is then added to the combat counter-reconnaissance table in the third column next to its related activity.

Step 4: Observe and Target NAIs. At this point, the what, when, and where of enemy activity have been identified. Now each of these NAIs needs to be observed or targeted to locate and destroy the enemy's "eyes." This is accomplished through further use of the table.

Each activity and each NAI, or each series of activities and NAIs, is assigned to one of the task force units for action. For planning purposes, this is made an entry in the Missions column. The actual method and type of assignment will vary with an individual unit's SOP and the forces that are available for counter-reconnaissance. (An excellent article that offers suggestions on counter-reconnaissance methods is "Countering Ground Reconnaissance," *Combined Arms Training Tips,* HQ CAC, Volume 2, No. 2, December 1983. Another is "Counterreconnaissance," by Major David J. Ozolek, INFANTRY, September-October 1986, pages 34-37.)

A short mission and intent statement is written in the fourth column, describing the action that is to take place. For example, in the fifth entry in the table, the S-2 believes that between 1900 and 2400 hours (first column), enemy reconnaissance squads will attempt obstacle-breaching operations (second column) through and at a number of NAIs (third column), and that a gauntlet of resistance needs to be raised to stop these efforts. His entry in the fourth column details the plan he has devised to counter the enemy threat.

After he completes the Missions column for all entries, the task force should have a comprehensive plan for defeating the enemy's reconnaissance effort. The completed counter-reconnaissance table, along with the accompanying map (Figure 2), provides an example of a finished plan ready for execution.

The use of this combat counter-reconnaissance planning process will greatly assist the S-2 as he goes about his task of producing a plan to defeat the enemy's eyes and ears during the defensive phase of the battle. Furthermore, he can use the same basic process and table to conduct reconnaissance and surveillance planning during the main defensive battle as well as in later offensive operations.

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The NTC and the Battalion S-2

CAPTAIN DANIEL J. McROBERTS

The National Training Center (NTC) is the best thing that has ever happened to tactical intelligence, because the training there has underscored the integral role of intelligence as a full partner in the combined arms team. Accordingly, maneuver battalion S-2s have felt tremendous pressure to turn academic theory into a practical means of killing the enemy.

To be effective, an S-2 must learn all he can about Soviet regimental organization, equipment, and tactics; streamline staff planning procedures; and know how to conduct a pertinent intelligence preparation of the battlefield (IPB) at platoon level. He has to be confident and aggressive in selling his analysis to his commander. And he must be forceful, because he is usually a lieutenant who must compete with the S-3, who is a major. In short, to avoid failure, he must be prepared, both technically and psychologically; there is no time for on-the-job research at the NTC.

NTC training subjects a unit's planning ability to the ultimate test. Unlike other training experiences, a commander must follow doctrinal staff planning procedures. He has to base his course of action on the enemy situation, just as he would in combat and his three primary concerns must be: Where is the enemy? What equipment does he have? and What will he do next? He can do nothing until his S-2 answers these questions, which makes him and his staff reliant on the S-2.

Suddenly elevated in importance, the S-2 and all of his systems come under close scrutiny. The immediate future of the unit is in his hands. The way he handles this responsibility will determine whether his unit wins or loses. The techniques he uses will determine how effectively he uses his knowledge.

Given the fast pace of the NTC, he will probably have to modify doctrine, especially as it relates to the IPB and briefings. After the first battle, when fragmentary orders control the scenario, the S-2 will probably go through the five steps of IPB in his head. He should be able to analyze the terrain quickly—particularly after months of studying it back in garrison—and develop the situation and decision support template within 10 to 20 minutes of receiving the brigade warning order.

ANALYSIS

For his staff estimate briefings to the commander, he will find that he does not have the time to spend on a lengthy treatment of each IPB step. The commander needs to see a reasonably accurate depiction of enemy forces immediately following each battle, and the S-2 must be able to meet that need with a hasty analysis. Of course, this will be only a rough estimate to allow the rest of the staff to get moving on their plans. By the time of the operations order, the S-2 will have refined his analysis.

For the same reasons he has to produce a hasty situation and decision support template, the S-2 will often have to brief his commander with little or no preparation. Again he'll have to depend on his own proficiency, and will do most of his analysis on the spot. Fortunately, all the S-2 really needs to know initially is the unit's next mission, its area of operations, and the location of enemy forces. He can surmise enemy strength on the basis of his battle damage assessment calculations from the previous battle, while the brigade close-of-battle intelligence summary can help him analyze current enemy activity.

In the case of graphics, the S-2 may again have to deviate from published doctrine. When he delivers his portion of the operations order, he should give only one overlay to each company commander. This overlay cannot be neatly placed into any one category, because none of the conventional labels apply. It is more than a decision support template, because it accounts for everything—terrain analysis, enemy situation, named areas of interest, and the reconnaissance and surveillance plan.

(Many Military Intelligence officers who have not been to the NTC will disagree with this practice, but at the maneuver company level, commanders don't have the time or patience for a handful of overlays. If the overlay is too busy, the S-2 should decide which information the unit can live without and erase it. One overlay will do.)

A combination of knowledge, experience, and good staff work will put the S-2 on the right track to success at the NTC. Still, everything will depend on the way he presents himself—on whether or not he can sell the intelligence. This, in

fact, is the most important part.

Decisiveness—a leadership trait that all officers should seek and demonstrate—is considered of premium value among combat arms officers. In their dealings with other officers, they expect confidence and aggressiveness. In many cases, young, inexperienced S-2s—through hesitation and a lack of confidence in their own analysis—fail to meet these expectations. This is exactly why the battalion S-2 must establish credibility with his commander. He can best do this by seizing every opportunity to brief, by articulating his analysis with utter confidence, and by driving his main points across emphatically.

The S-2 has to be bold, sometimes even obnoxious, as other officers will undoubtedly "sharpshoot" him. This is especially true if he is competing with a domineering S-3. But if the S-2 believes in what he's telling the commander, then he also has to make his commander believe in it. He has to decide on a probable course of enemy action, sell it to his boss, and defend it to the end—even if it isn't precisely on target. Nobody can always be completely right, but the S-2 must always be confident.

The NTC is one battlefield on which tactical intelligence has proved itself. It is here that the importance of intelligence has become plainly visible to everyone. Yet the success of each combat maneuver battalion depends largely on the ability of its S-2. The S-2 should therefore work hard to become the best. His commander should determine the S-2's skill level far in advance of deploying to the NTC and should get personally involved in correcting any shortcomings. Personal interest on the commander's part is especially critical if he intends to put the S-2 in charge of counter-reconnaissance. In this case, the S-2's responsibilities will greatly increase. If he's weak in the basic skills, the addition of counter-reconnaissance planning and execution will only overwhelm him and hurt the unit.

The commander must know what to look for in a good S-2 and then develop his own accordingly. Command interest, technical knowledge, and a strong dose of confidence will show the S-2 the way toward success. Recent history tells us that the S-2s who have done well at the NTC have had these factors in common.

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Motorized at the NTC

LIEUTENANT COLONEL STEVEN D. VERMILLION

Since its inception in the early 1980s, the motorized concept has gone through several validation tests. Until recently, however, it had never been exposed to a highly trained opposing force employing Soviet tactics. The 9th Infantry Division (Motorized) was given an opportunity to confront the best opposing force (OPFOR) in existence when its 3d Brigade was scheduled for a rotation at the National Training Center (NTC) in May 1988.

Unlike other divisions based in the continental United States, the 9th Division had had no major NTC experience up to that point and therefore had to set about determining what NTC training was all about. At the same time, the NTC didn't know much about the motorized division and had to start from scratch in designing scenarios and structuring an opposing force of the type that the brigade could expect to encounter.

The doctrinal manuals and the mission essential task lists (METLs) of both the 3d Brigade and its battalions were used as a starting point, in addition to the experience gained from numerous training exercises at Fort Lewis's Yakima Firing Center. A task organization was developed in September 1987; this led to clarifying what the brigade's missions at the NTC would be and the size of the area in which the brigade would be operating.

The authors of the motorized division plan created a task organization in which the battalions were already task organized. Unlike pure tank and pure mechanized battalions, which normally cross-attach their companies on the basis of METT-T (mission, enemy, terrain, troops, and time), the motorized battalions did not have to go through a mechanical reorganization process.

Through the brigade's experience, however, its leaders knew that its own organizational design lacked sufficient dismounted infantry. When the NTC task organization was planned, therefore, the maneuver companies were cross-leveled by using the assets of both of the division's brigades. This meant that, based on the METT-T assessment, more balanced battalions were available.

The initial task organization is reflected in the accompanying box. Unfortunately, the forces marked with an asterisk

were deleted from the task organization just before the brigade deployed to the NTC. The loss of these additional forces severely affected the maneuver force's ability to execute motorized doctrine to its fullest extent. One of the key battlefield requirements, however, is to maintain flexibility and to use whatever resources may be available to the greatest extent possible. Thus, the brigade went to do battle with the OPFOR using the forces allocated to it.

The brigade's preparation for the rotation consisted of a series of map exercises, NTC tactical exercises without troops, and command post exercises. These exercises were designed in a building block fashion—starting with individual soldier tasks and ending with collective tasks in brigade operations—to allow the commanders, staff members, and soldiers of the brigade combat team to prepare for the NTC.

Through the efforts of many headquarters, each task force company commander was able to participate as part of at least one augmentation force at the NTC before the brigade's scheduled training. This experience allowed the commanders to become familiar with the terrain, with the way the OPFOR conducted its operations, and with maneuver in the vast desert expanse.

The highlight of this seven-month training period was a 21-day division MILES field training exercise conducted at Yakima Firing Center that duplicated the expected NTC training as nearly as possible. The 2d Brigade provided a tank battalion and elements of a heavy combined arms battalion to serve as the opposing force. Additionally, that brigade provided a full complement of observer-controllers to control the maneuver forces and provide the critical after-action review. This full-dress rehearsal proved of inestimable value to the 3d Brigade combat team.

At the NTC, the battalions and the brigade were given the following missions to execute in a force-on-force environment:

- Night road march.
- Movement to contact (battalion).
- Covering force (battalion).
- Defense in sector (battalion/brigade).
- Night deep attack (battalion/brigade).
- Counterattack from hide positions (battalion).
- Counterattack from reserve position (battalion).

The brigade was able to identify many strengths and weaknesses from these missions, and although the observers who followed this training generally felt that the brigade combat team did a superb job—especially since it was the first motorized infantry NTC rotation—the NTC after-action review process handed out its share of constructive criticism. The major weaknesses that were identified are now being incorporated into the brigade's training plans to bring its combat capabilities to the highest possible state of readiness:

Reporting. Although great emphasis had been placed on the timeliness and accuracy of reporting, standards acceptable to the brigade were never achieved. Accurate reporting is a must if a commander is to position his resources so as to bring mass destruction on the enemy.

Reconnaissance. The brigade's potential reconnaissance ability was diminished a great deal when the scouts that are organic to the division and the remotely piloted vehicle (RPV) were prohibited from participating in the NTC rotation. Too, there was always the artifically imposed no-penetration line, beyond which friendly forces could not go to establish OPs or conduct patrols to gather intelligence. Additionally, the battalion scouts did not have any thermal acquisition devices, and this further hampered the reconnaissance effort.

Reconnaissance and counter-reconnaissance got progressively better, though, to the extent that in brigade force-on-force operations, the OPFOR was denied the ability to enter the brigade's planning cycle. The brigade was successful in defeating much of the OPFOR's mounted reconnaissance and destroyed more than half of its division reconnaissance team locations. In the early operations, the OPFOR reconnaissance force was able to move virtually unimpeded through the brigade's sector of operations.

OPFOR Counterair. The method the NTC used in employing the OPFOR "HIND-D" helicopters (modified UH-1 Hueys) allowed them to inflict many casualties upon the maneuver forces. The brigade had never faced such a formidable threat from an airborne weapon system. As the battles progressed, the soldiers got better at defeating the OPFOR air with air defense weapons and, in some instances, with ground TOW II missiles.

Synchronization. The brigade brought a great number of "killing systems" to the NTC. It developed precise plans for their employment, designed engagement areas, and brought its forces to bear on the enemy. For one reason or another, though—whether because of communications, weather, or a misreading of the

TASK ORGANIZATION

TF 2-1
- 2-1 IN (LA) (–)
  - A/2-47 (HTC)
  - C/2-47 IN (MIC)*
- TACP

TF 2-60
- 2-60 IN (CA-H)
  - A/2-1 IN (LAC)
- TACP

3-11 FA (155T)
- HQS/6-11 FA (LTACFIRE)
- E/333 FA (TAB)*
- X/C/1-84 FA (MLRS)*

99 SB (F)
- X/709 SB (COMPOSITE)

1-9 AHB
- X/9 AVN (COMPOSITE)
- X/X/3-9 AVN (AVIM)

C/15 EN (CBT)
- D/15 EN (EQUIP)
- 864 EN (CORPS CBT)*

B/1-44 ADA
- HHC 1-44 ADA (FAAR)
- 1-4 ADA (HAWK)*

B/109 MI
- D/109 MI (HACJAM, RPV)*
- E/109 MI (SCOUTS)*
- DET 9/109 MI

HHC, 3D BDE
- TACP

3/B/9 SIG

1/9 CHEM (DUAL PURPOSE)
- X/3/9 CHEM (RECON)*

2/9 MP

battlefield—at times the brigade was unable to bring these systems to bear on one focused point on the battlefield. In some instances, for example, ground and aviation forces were together but could not be synchronized with the artillery. The opportunity was often there to soundly defeat the OPFOR if the proper synchronization had taken place.

In additon to these operational lessons, a number of doctrinal lessons also came out of this NTC training:

• Without precise battlefield intelligence and the ability to infiltrate through the OPFOR, the brigade's deep attack mission is extremely risky and does not warrant the commitment of the forces.

That mission is usually consigned to a light attack battalion and is designed to destroy a key target such as a regimental or divisional artillery group, a regimental or larger command post, or another type of lucrative target. The keys to success in this operation are precise intelligence and an area along the FLOT (forward line of own troops) through which the force can infiltrate.

Neither of the deep attack missions attempted during the rotation succeeded. The designated targets were command posts that, after a plan for attack was developed, would move to other locations on the battlefield. The defending force through which the light attack battalion had to infiltrate was either a force comparable to it in size and capabilities or a smaller force positioned in a constricted movement corridor. In either case, the OPFOR always maintained a superior combat ratio.

• The personnel and equipment that were designed for the motorized force—such as long range scouts, remotely piloted vehicles, and the like—must be used in the future. They will enable the commanders and their staffs to better see the battlefield and to get inside the OPFOR decision cycle and position forces and other combat assets to bring mass destruction upon the enemy without becoming decisively engaged.

Motorized forces as they are currently equipped operate on the fringes in all combat operations. The TOW II is a fine weapon, but it is no match for a tank's main gun. The TOW was able to inflict kills beyond the 1,500-meter range. But with the closing capability of the OPFOR, and with the tank's ability to fire rapidly and to engage multiple targets with one weapon system, the OPFOR was able to get within main gun range and defeat the TOW. Once the tanks closed to 1,500 meters or less, the brigade's HMMWVs (high mobility multipurpose wheeled vehicles) were safer if they stayed in position instead of moving to alternate firing positions. When they did displace, the rapid-firing tanks could kill off the HMMWV's slow-firing TOW systems.

• Another infantry company is needed if the motorized brigade is to perform the traditional infantry roles, especially if the force is equipped with some variant of a tracked assault gun with a two- or three-man crew.

Pure armor forces within the Army have long realized the need for infantry to provide close-in security for the armor maneuver forces, to secure objectives, and to perform those traditional infantry roles that an armor force cannot. And the same infantry roles are applicable to motorized forces.

• The wide sectors the brigade chose to operate in prevented the maneuver forces from fighting a successful defense in depth.

Early in its coordination planning with the NTC—and given its initially planned task organization—the brigade chose a wide sector similar to what it might expect in a Southwest Asian scenario. With the slow rate of fire of the HMMWV TOW II, however, the wider brigade sector proved to be a distinct disadvantage. In some scenarios, for example, the battalions operated in sectors as wide as 18 kilometers.

Less width in sector and more depth would have been a better option. An assault gun with a rapid-fire capability as well as mobility on the battlefield would obviously allow for a wider sector to be accommodated, but depth in sector is still vital to a good defensive motorized fight.

• The creation and implementation of a brigade scout company must be a part of any future organizational design.

Battalion scouts with the combat support company provided the battalion with limited eyes on the battlefield, but the brigade had no resources to deploy forward in the brigade sector for security, counter-reconnaissance, or just seeing the enemy. A brigade scout company would provide this capability and would be useful in a mechanized or armored brigade as well as in a motorized brigade.

The final observations reflect how the brigade performed as a collective group during the rotation and some of its accomplishments. Naturally, these thoughts tend to be somewhat biased, because the staff devoted thousands of manhours to this rotation to achieve as much success as possible.

One of the strongest resources the brigade took to the battlefield was its soldiers. From the frontline soldier all the way back to the last soldier in the forward support battalion, each had an indomitable will to win that was displayed in his aggressive attitude. These soldiers wanted nothing more than to beat the OPFOR soundly, and they showed the true warrior spirit.

The TOW crews were hampered by their inability to collimate the AN/TAS-4 night sight to the MILES equipment during the hours of darkness. Nevertheless, the task force as a whole obtained 30 percent more kills than the normal mechanized or armored task force. This success may have been due in part to a target rich battlefield, or in part to the division's fine TOW gunnery programs.

At the NTC, artillery support with the towed 155mm howitzers proved unsatisfactory for motorized warfare. The towed systems lacked mobility and maneuverability and often caused the maneuver forces to outrun the artillery coverage in the offense. Even with this handicap, the artillery did attain a record in sustained Copperhead kills. The positioning of the artillery and the expertise of the ground laser location designator (GLLD) operators allowed this precise munition to become a significant combat multiplier.

Feedback from multiple sources stated that the combat support and combat service support were the finest that had been seen at the NTC. Whether it was the finest or not, the entire combat team did not suffer any logistical constraint that affected its tactical operations. Helicopters were used extensively from the division support area forward to the brigade support area, and even to the battalions. All

ground logistical operations were conducted during the hours of darkness, and this increased the survivability of the forces that were deployed forward. When the OPFOR entered the brigade support area, the soldiers rapidly changed from supporters to warriors.

Engineer operations were dynamic on the battlefield. The ground emplaced mine scattering system (GEMSS) proved formidable against the OPFOR. Minefields could be emplaced rapidly at night, and they often went undetected by OPFOR reconnaissance. Initially, the engineer companies were to be equipped with both dozers and SEEs (small emplacement excavators). Consequently, the companies' backhoes were turned in awaiting the SEEs, but they did not arrive in time to participate in the rotation. The only assets available to the task force were dozers and scoop loaders. Not only did the soldiers have to put barriers in; they also had to remove them at the end of each operation.

The OPFOR's jamming was ineffective because the 9th Operational Security Detachment used SCD (simulated communications deception) extensively. This allowed the task forces as well as the brigade to operate unimpeded by electronic warfare.

Considering that the brigade did not have some of its forces and equipment, which would have greatly increased its capabilities, its performance at the NTC was creditable. The Army still needs this "middleweight division" with its ability to deploy rapidly to any hot spot in the world and defeat or contain an armored or mechanized force.

Lieutenant Colonel Steven D. Vermillion, now executive officer of the 3d Brigade, 9th Infantry Division, was brigade S-3 during its NTC rotation. He previously served as deputy G-3 of the division. An Aviation officer, he flew "dustoff" missions in Vietnam, and has had extensive experience in armor and cavalry units.

MCBS
The Multi-Component Boot System

CAPTAIN PETER E. BLABER
CHIEF WARRANT OFFICER-2 KEVIN M. EGAN

On Christmas Day 1776, when General George Washington formed his forces outside Trenton and they began marching, cruel ice cut through their flimsy footwear and drew blood. The next morning, the rear echelons could follow their route by tracking the bloodstains in the snow.

Technology has changed many aspects of the Army since then, but the realities of dismounted movement remain the same. Today's light infantryman continues to rely upon his feet to move and fight in a wide variety of environments. Leaders must therefore place considerable importance upon the choice of footwear for their soldiers and upon the preparation and care of their soldiers' feet.

There have been great advances in podiatry, textiles, and boot designs, but rarely have all of these areas come together to form a functional system. The 2d Battalion, 75th Ranger Regiment has been working with the Army's Natick Laboratories in an attempt to achieve a workable synthesis of these advances and to find an improved march-boot system.

The major development flaw in the search for a solution in the past has been the tendency to fix on one set of climatic conditions. Over the past few years, for example, there has been a great deal of interest in the development of cold weather footwear. The need to keep feet warm and dry has led to experimentation with insulated boots of all types.

Although insulated boots are superior in extreme cold, they have severe limitations as march boots. It has been our experience that during long movements the temperature may be in the 50s at the beginning of a march and later may drop into the low 30s. The feet of a soldier marching in insulated boots are prone to sweat more, and this moisture will eventually soak his boots. With no optional insulation to be removed in response to rapidly changing environmental conditions, insulated boots take several days to dry, and until they are dry they only increase a soldier's risk of cold weather injury.

At the other extreme, the boot of choice for soft, muddy, wet tropical terrain is the jungle boot, which is designed to permit good air circulation and to dry quickly. Too, the steel plate in the sole offers protection against spikes. But these very attributes limit its usefulness as a march boot. The sole is hard and inflexible and does not absorb shock well. The lack of flexibility increases the incidence of achilles tendonitis in soldiers, and the protective plate absorbs heat from asphalt roads, causing sweating and subsequent tissue breakdown and blisters. In operational areas of wide temperature extremes, such as desert and mountain, the

cold steel plate, combined with the extra ventilation, cools the toes quickly, inviting cold weather injury even in temperatures in the 40-to-50-degree range.

The intent of our study, therefore, was to fill the void between extreme cold weather and extreme hot weather footwear. The result of this joint effort is the Multi-Component Boot System (MCBS). The system includes no new discoveries or revelations—just the simple application of medical and technological realities. It is made up of four components—the Army black leather boot, the tan/ski mountain sock, the Gore-Tex sock, and the Gore-Tex gaiter.

The selection of a march boot for the infantry soldier has always been controversial, especially in airborne and Ranger units where a great deal of emotion seems to be attached to the jungle boot. When the 2d Ranger Battalion switched to the all-leather black Army boot for road marches, many Rangers claimed that this boot caused more blisters than the jungle boot. During the 12 months prior to our tests, though, the battalion aid station had evaluated the jungle boots of all the Rangers who reported with blisters; then they had checked the soldiers for boot size, carefully measured their feet, and exchanged poorly fitted boots through the central issue facility. By contrast, most of the soldiers who got blisters from wearing the all-leather boot had been fitted with the traditional "sit down and try it on" method at initial clothing issue. These policies gave the false impression that the jungle boot caused less injury. Our test results demonstrated, however, that the all-leather boot, when fitted under our boot-fitting criteria, produced a significantly smaller number of friction and stress-related injuries than had been seen with the jungle boot.

Recent studies indicate that a foot under the stress of a combat load will become wider and longer and will swell about one to two percent during forced marches. Boots fitted without regard for the space loss will cause injury. Soldiers should be individually fitted for their march boots. Garrison boots normally worn by or issued to soldiers without sizing are not the best ones for road marching.

The correct fitting of boots requires little time, and the benefits are well worth the effort. The first thing a soldier needs to understand is that the length of his foot does not dictate the size of boot he needs. Feet of the same length may need boots of different sizes, because one soldier may have short foot bones (metatarsals) and another may have longer foot bones. This difference means the ball of the foot may be in a different spot in relation to the last of the boot, causing the toes to cramp and twist.

MEASUREMENTS

Boots must therefore be fitted and checked for both arch length (measured heel to ball joint) and correct foot length (measured heel to toe). It is important that a soldier be fitted for the larger of the two measurements: If the heel-to-toe measurement indicates a size 10 boot and the heel-to-ball measurement indicates a 9½, the soldier's correct boot size is 10. In short, the correct size of boot for a particular foot is one that accommodates the ball joint in its proper place and leaves enough room for the toes. Each foot should be measured separately, because it is common for a soldier to have differences in length or width between feet. If needed, two different sizes of boots should be requested for him.

The best foot-measuring device available is the "Branock Device" used by podiatrists. It is simple, requires little training, and is relatively inexpensive at about $100.

It is our recommendation that a soldier road march or run three to five miles before having new march boots fitted, to adjust for swelling. He should wear both a thin inner sock and a thick outer sock during the fitting. He should wear a rucksack weighing as close to his combat load as possible and should stand on the shoe sizing device leaning slightly forward, with some of his weight on the balls of both feet.

The person fitting the boots should ask the soldier if he feels the tops of his toes touching the toe cup or pressure along the sides of the great or small toes as he leans forward. If he does, the boot is too small. The length and width of each foot should be measured two or three times to assure accuracy.

The correct insole is also an important part of boot fitting. Insoles help to relieve the shock generated by heavy loads. These insoles may be made of PORON, a new material of superior shock absorbency, available from Wellco. These should be purchased in thicknesses of one-sixteenth inch and one-eighth inch. The thicker insole should be used in the initial boot measuring procedure and

The Multi-Component Boot System

should be worn during the early stages of a road march. Midway in the march, a soldier can change to dry socks and the thinner insole to allow for the swelling of his feet.

Socks provide protection and serve not only to insulate the foot from the extremes of cold and heat, but also to protect it from abrasion and friction caused by the rough interior of the boot. Socks also provide cushioning from road shock and help transfer moisture from the skin surface to the boot surface. In addition, they allow for the swelling and expansion of the foot during heavy marching.

A sock for marching must be dense enough to prevent the abrasion of the foot, especially in the areas of high compression; it must cover the entire foot with a uniform thickness; and it should have no seams, especially at the area of high pressure. The thickness of the sock becomes critical during prolonged periods of marching; the thicker the sock, the longer it will protect the foot against point friction. In addition, the sock must be able to transfer moisture away from the skin surface.

The best sock we tested was the tan/ski mountain sock (75 percent wool, 25 percent nylon cotton), which is available in the Army's inventory (NSN 8440-00-153-6717). Its only problem is a seam across the toe.

This sock should be worn over a thin inner sock of nylon or, better yet, polypropylene. We discovered that even during the high ambient temperatures of summer, this sock causes a negligible increase in perspiration, yet it significantly increases the foot's protection from friction, making it a better year-round sock. With the removal of the toe seam, it would be the best sock for cold or hot weather available anywhere.

The cog in the MCBS is another sock—the black 13-inch Gore-Tex sock made by ROCKY. Worn over the mountain sock, it is equally effective in both cold-wet and hot-wet weather. It keeps the foot completely dry in the harshest of conditions, with little or no effect on movement.

Besides the fact that a soldier does not have to change his socks constantly with the Gore-Tex sock, it also prevents the onset of immersion and trench foot.

When a soldier's feet are saturated for prolonged periods, they become tender, and marching long distances becomes difficult. This is simply not the case when a soldier wears his Gore-Tex socks, whether in the tropics or in Europe.

The final component of the system is the Gore-Tex gaiter, which is in the Army's supply system. Worn around the outside of the boot, it keeps feet warm and dry in the worst of field conditions, including deep snow, and it works especially well as an add-on during halts because it offers increased thermal protection. For units that cannot obtain the gaiter, a good substitute is the black rubber overboot, but it is heavier.

Leaders must be aware of the difference in care procedures between the old style boot and the new speedlace combat boot. The old style is best waterproofed with oils and waxes. This should be done routinely to re-establish their water repellancy, and the seams and welt are the most important points to cover. The new boot, on the other hand, has a silicone-treated leather that must be waterproofed with a silicone material. The use of oils and waxes destroys the boot's water vapor permeability, breathability, and waterproofing.

Leaders, therefore, should not require their soldiers to polish their boots. Silicone-treated leather does not take a high shine in any case. In the field, soldiers should treat their boots every two days with silicone, but should not put them back on until the silicone has dried—the chemical can cause their skin to blister.

Even with the best boot system, the inspection and care of soldiers' feet is still an important part of a commander's responsibility. Leaders should frequently inspect feet for corns, blisters, and ingrown toenails, which are the major indicators of poorly fitted footwear.

It is important that excess callous formation be removed because it causes cracks and fissures. Calluses can be filed down with emery boards or fine sandpaper. Bunions, which are caused by pressure and bone deformities in the foot, should be padded with moleskin before a march. (Many of these abnormalities can be surgically corrected, and soldiers with bunions may need to be evaluated by a medical officer.)

When feet get wet, protective calluses, which normally build up on the feet of infantrymen, turn into hard spots that serve to break down the surrounding skin, thus causing cracks and tears, and a soldier feels like he is walking on rocks.

Wetness from perspiration can be reduced if soldiers use a foot powder that contains aluminum chlorhydrate. We recommend PEDI-DRY, manufactured by Pedinol Pharmacal, Inc., and available through the medical supply system (NDC-0884-0349-02). Any spray antiperspirant that contains aluminum chlorhydrate can be substituted, though, and, in fact, is preferred. This process will stop about 70 percent of the sweating in the feet.

During the winter months, the feet

should be sprayed two or three times a day for one week and then once a day for the rest of the winter. If fissures or cracks develop, the spray should be discontinued until the feet are healed, and then should be used less frequently to control sweating.

In the winter, moisture will not only break down tissue but will also destroy the insulating properties of any boot or sock. It cannot be stressed enough that cold dry feet can be warmed but cold wet feet cannot. The feet should be massaged before and after marching to stimulate circulation and relieve the build-up of lactic acid.

Blisters should first be cleaned with betadine and allowed to dry for five minutes to kill bacteria. Then the fluid should be released from the side of the blister with a sterile needle. The fluid should be pressed out gently leaving the surface of the skin intact to provide natural protection. Then the hole can be widened by the needle to insure that the blister fluid continues to drain. The area should be prepared with tincture of benzoin, avoiding areas of broken skin. Then a doughnut of moleskin should be applied to the intact skin around the blister. A loose covering of tape will provide extra protection.

Toe nails should be trimmed straight across and not rounded. Cutting nails too short and rounding them at the edges can result in ingrown toe nails. Long nails, on the other hand, will wear out socks. Soldiers with chronic ingrown toe nails should be measured for proper boot size.

As with any new method of doing things, there will be some resistance to the Multi-Component Boot System. The best way to implement it is through unit-level education and experimentation down to infantry squad and team levels.

If leaders will supervise all aspects of foot care, from sizing to foot inspection, they will increase their soldiers' ability to overcome the many age-old obstacles to dismounted movement.

Captain Peter E. Blaber, was executive officer of Company A, 2d Ranger Battalion, 75th Ranger Regiment at Fort Lewis at the time this article was written. He previously served with the 1st Battalion, 38th Infantry in Korea. He was commissioned from Officer Candidate School in 1984.

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Thoughts on Leadership

WILLIAM R. FREEMAN

I recently ended more than 30 years of Federal Service, and I'll miss the challenges, the good times and the bad, the locations (some great, some not so great), the people (bosses, peers, subordinates, and all the others), and most of all, I'll miss the fellowship and comradeship.

So with this in mind, I'd like to put some of my thoughts on leadership down on paper.

How many times have you been told to make a self analysis, pick out your strong points and your weak points, and then capitalize on your strong points and strive to strengthen your weak points? Probably often. But I'll wager you have rarely been told of a way to do this. Try this technique:

First, use your mind's eye to bring up a good mental picture of the person you most respect, revere, admire, or whatever you want to call it. After you have a vivid memory of this person, take him (or her) apart, bit by bit, piece by piece, and step by step. Find out what qualities he has that puts him in this category. Whoever he is, I know him, and here are some of his qualities:

- He is selfless.
- He truly cares.
- He always seems to be there when he's most needed.
- His advice or guidance is solid, but if he, by chance, ever gives you wrong information, he will do everything possible to set you straight.
- He believes in the Golden Rule, and lives it.
- He puts himself after others.
- He gives a job his best and expects the same of everyone else.
- He trusts in human nature, even though it sometimes costs him.
- He gives of himself, although it sometimes hurts him.
- He is, either directly or indirectly, a friend.

This person we'll call Number One.

Second, do the same with the person you most despise, have the most contempt for, or whatever you want to call it. Then take him (or her) apart the same way and find out what qualities he has that puts him in this category. Again, I'm forced to say that I know him too. Here are some of his qualities:

- He is self-centered.
- He cares—for himself and his ambitions.
- He always seems to be there—when the rewards are to be handed out.
- His advice or guidance, if bad, will stand. He will not admit he can make a mistake. ("You weren't listening," or "You misunderstood.")

• He believes in the Golden Rule—when it benefits him.

• He puts himself first, foremost and always.

• He gives a job his best—if it meets his personal goals.

• He trusts in human nature—and uses it, to its last drop of blood.

• He gives of himself—when the right person is watching.

• He is a friend indeed—if *he* is in need.

• He will treat you and the whole world dirty, if he sees that from this he can make a personal gain.

• When asked to do something, his first question is, "What's in it for me?"

This person we'll call Number Two.

In these two people, you now have solid and living examples of the strong points you are asked to capitalize on and the weak points you are asked to strengthen or change.

Next, give a detailed look at a third person. This is the one who will give you the most trouble. He's the sneakiest, sliest, no-account, untrustworthy person you can find. His name is *Self, Ego, Me,* or *I.* If you look at Self in terms of the traits of your Number One and Number Two persons, you'll probably see how close to Number Two he comes.

(But let's be fair to Self. You know too much about him, deep dark things that the rest of the world has never dreamed about him. So if you, in your mind's eye, can truly get him to stand midway between Number One and Number Two, the rest of the world will see you, hopefully, as you see Number One.)

It takes absolutely no conscious effort or thought to be like Number Two. All you have to do is to let yourself go and worry only about yourself and you'll be just like him. But it will take an all-out commitment and dedication to purpose to even get into the same ballpark, let alone the same game, as your Number One person.

If you're a leader, for example, remember your bosses, the thoughts you had of them, both good and bad. Well, your people are having those same thoughts of you, today. You can be as hard on them as you want to be, as long as you're hard-working, fair, aboveboard, and honest—and as long as you care. Fail in any one of these, and you'll lose. And once you've lost, it will be next to impossible to regain what you've lost.

Yes, it's a long, hard row you must hoe, and the job will never be complete. The rewards are longer hours, harder work and, once in a great while, a "Thanks, Sarge (Sir)," and the personal satisfaction of knowing that you gave it your best. All a leader can ask for is to be respected by his people; he may never be liked, but isn't respect more important?

If you're a follower, remember that your leaders cannot satisfy *all* of your wants and needs. If they tried, they would soon be raving lunatics, and it would be you who would have to try to lead in their place. If you give the things you expect from him—dedication, honesty, hard work, and caring—both of you will be the winners. Then, most of your needs and a lot of your wants will be met.

All through history, people and nations have risen to the top only to fall—the Huns, the Ming Dynasty, and the Romans. They all had great societies and were powerful, but they all made one fatal mistake: They forgot the standards and principles that made them great, and when they did, they fell.

Our own nation was built on "We the People," not "I the Individual." In the final analysis, it will be the *teams* that will survive and make history, while the *individualists*—those who believe the individual should take precedence over the interests of the state or the society—will perish and become a mere footnote in the pages of history.

I have stood the roll calls, the stand-to's, and the alerts. And in my mind and heart I did my job to the best of my ability. But now, the time has come for me to pass these duties on to others. I salute you and ask only that you walk proud and tall, holding the guidon and standards high for all to see.

William R. Freeman, Sergeant Major (Retired), served in his final assignment as sergeant major of the Directorate of Engineering and Housing at Fort Benning. He began his service in 1957.

European Reconnaissance Patrols

Captain David R. Breuhan

During the 1988 Boeselager Competition, hosted annually by the West German Army, the Reconnaissance Platoon of the 1st Squadron, 1st Cavalry, equipped with M113A2s, participated as one of the 24 teams from 14 NATO countries.

The competition includes eight events in which eight-man teams are tested over a four-day period on their scouting skills. The most important event is the mounted reconnaissance patrol, or "day recon." In this event, a patrol is required to maneuver, conducting a zone reconnaissance through enemy territory, for 25 to 35 kilometers. The objective is to report enemy locations, avoid being killed, and reach an observation post (OP) within a given period of time.

In preparing the team for the day recon competition, I wrote a training manual for maneuver, and the information presented here is taken from that manual. Although this information is especially applicable to units in Europe, many of the tactics could also be incorporated into the standing operating procedures (SOPs) of stateside units to improve their chances of surviving on the battlefield.

Some of the German tactics do not directly parallel those of the U.S. Army, but the *Bundeswehr* must follow doctrine that is based upon the type of vehicles and weapons it uses when maneuvering. For example, the Germans emphasize road-bound scouting because they use wheeled reconnaissance vehicles.

Highlighted here are the unique variations and the action-on-contact drills that can be most easily adopted by U.S. forces. Although this discussion follows a patrol from the operations order (OPORD) to actions on the objective, reconnaissance platoon leaders will want to pay particular attention to the section on the conduct of the patrol.

The first order of business is assembly area procedures. The purpose of any assembly area (AA) is to provide a secure environment in which to prepare for combat operations. Many units have their own SOPs for assembly areas, and these SOPs can also contain specific instructions for issuing the OPORD. (The best, most detailed OPORD format can be found in the U.S. Army's Ranger Handbook, ST 21-75-2.)

Once in the assembly area, the patrol leader places the assistant patrol leader in command and moves with one scout to the mission briefing. This scout should be the patrol's radiotelephone operator (RTO). He can help copy graphics or make

a copy of the order for the assistant patrol leader.

There are other important assembly area procedures: The radio speakers are turned off, but the patrol continues to monitor the radio and maintain 360-degree security. The patrol members never assume that any area is secure, and they make sure all vehicle track markings on the ground are erased. Before going off to receive the OPORD, the patrol leader tells the assistant patrol leader where he will give the order to the patrol members when he comes back. Also, he gives a number combination to the assistant patrol leader.

When he returns and issues his OPORD, the patrol leader includes the following information in addition to the normal list of OPORD essentials:

Situation: He points out the direction from which the enemy is coming, points to the north, and points to his location on the map. He discloses the missions and locations of the adjacent friendly patrols and points out the possibility that the patrol may get a fragmentary order to link up with a friendly patrol once the mission is under way.

Mission: All pertinent information—who, what, when, where, how—is included.

Execution: All of the submissions are included and called in as accomplished.

- Scheme of maneuver. Dominant terrain is highlighted along the route, and the route to passage point is described in detail.
- Plan of fire support. Supporting units are listed.
- Coordinating instructions. All action-on-contact drills are briefed.
- Service support. Support is briefed as necessary.

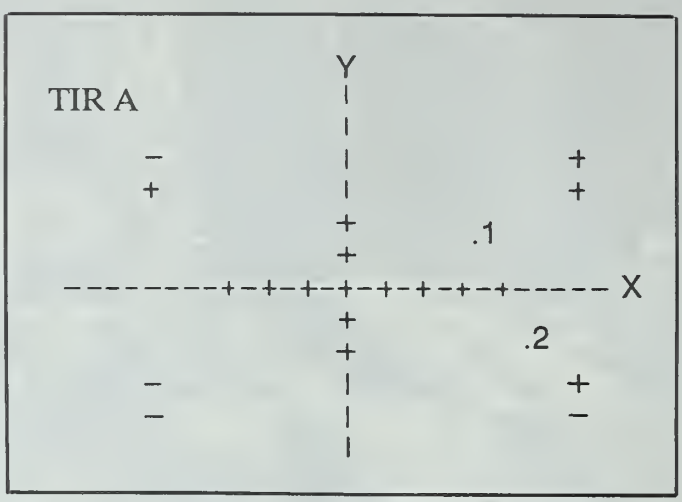
Command and signal: All signal items are included, and the command post location is given.

The German Army uses a terrain indicator reference system for calling in spot reports, using the X and Y axes of the geometric plane as shown in the sketch. The X coordinate is given first, the Y coordinate second. Distance is in hundreds of meters. The center of the coordinate axis will usually be the intersection of grid lines, with A being the center of the reference system. Point one would be A plus 30, plus 20. Point two would be A plus 40, minus 20. (This is written A + 30, + 20 and A + 40, − 10. "Three zero" (30) is equal to 30× 100 meters, or 3 kilometers.

The primary route is given in the execution paragraph. The patrol leader also selects alternate routes he can use if, for some reason, he cannot follow the planned primary route and must bypass certain areas. He gives these routes to his headquarters and to the assistant patrol leader, and he mentions them in the operations order.

Points along the primary route should be numbered in sequence, for example, from 1 to 7 along an east-west axis. Odd and even numbers can be used to indicate the checkpoints on the alternate routes. An alternate route to the north of the primary route, with checkpoints at major towns or road intersections, can use odd numbers—9, 11, 13, 15, 17—while an alternate route to the south can be numbered with even ones—8, 10, 12, 14.

These numbers allow a patrol leader to give a quick fragmentary order to his assistant and to his higher headquarters



without looking for town names, grids, or reference system coordinates. For example, "Bypass 2, 11, 13, 4," would indicate to headquarters that the patrol leader has selected an alternate route that leaves the primary route at 2, goes north to 11 and 13, and rejoins the primary route at 4.

When leaving the assembly area, the patrol may stop enroute to the passage point to observe for enemy activity. They do not assume that the enemy reconnaissance elements are not active or that they are only in front of the line of departure (LD) or line of contact (LC). When the patrol reaches the passage point, it displays a recognition signal, usually a colored flag, which will be answered by the forward unit.

When establishing contact with the forward security elements, the patrol stops at a distance of 50 meters from the actual passage point so as not to give away the positions occupied by those elements. The patrol is usually met by a soldier who will lead the patrol leader and a scout to the commander of the forward element. The assistant patrol leader, meanwhile, remains with the vehicles and assumes command. He sees to it that the .50 caliber machinegun on the trail vehicle is turned rearward and that 360-degree security is established. The engines of the vehicles are then turned off and the scouts observe and listen.

The most important aspects of the passage of lines are to speak slowly and listen carefully so that the commander of the forward security element (particularly if he is an allied soldier) will understand the information the patrol has and its questions. The forward unit's information may be more recent than that in the patrol's OPORD, and the changes, if any, could affect the patrol's mission.

When it departs, the patrol avoids exposing the forward unit's location to the enemy, and moves one terrain feature away before crossing the LD/LC. It does not use a road close to the passage point unless the forward unit has told it to do so. Even though German doctrine states that the patrol will "continue its travel away from its own guarding security force," the selection of which route to take is left to the discretion of the patrol leader.

Following its crossing of the LD/LC, the patrol moves quickly in travelling formation to take advantage of the overwatch cover afforded by the forward unit. The scouts, however, still remain alert.

After moving out of overwatch range, the patrol begins a bounding movement using standard "set-move" drills. The terrain will dictate the distance between bounds. Visual contact is maintained between vehicles. The scouts use caution at the outset of the mission to ensure that they do not miss any initial enemy forces and lose an opportunity to break radio listening silence at the earliest possible moment.

As it moves along, the patrol makes every effort to obtain information. The primary route stated in the order and possible enemy locations were probably based on intelligence estimates or a map reconnaissance. Once on the ground, though, the patrol leader may discover that the actual terrain gives the enemy other locations in which he can position his armored vehicles, artillery, or forward supply depots. The patrol leader uses his initiative and thoroughly scans these areas.

In Europe, there are many areas where the terrain resembles a bowl. Large, wide valleys surrounded by ridgelines offer excellent areas from which to observe for enemy activity, and the patrol stops and dismounts to do this. Depending on the time restrictions, the patrol leader determines how many observation halts he can afford to make. He takes advantage of the terrain, conceals his vehicles, and turns the engines off when he dismounts his scouts.

Roads can often be found on ridgelines, and the vehicles using them will often be skylined, especially if the area is not densely forested. The leader takes time to check the ridgelines to his left and right, as well as forward and rearward, for convoys or single vehicles.

The key to reconnaissance is stealth and proper observation. Although the patrol members may believe that they are in a particular belt of the enemy's defense, they must not focus their observation entirely in that area. For example, if the patrol believes it is in the enemy's main defensive belt, it must not look for tanks only. Tanks need Class III and V supplies, which means that trucks and supply vehicles may also be in the area.

Scouts scan the terrain first with naked eye, in 50-meter belts, left to right, then right to left, looking for unnatural patterns on the landscape. Then they scan with binoculars. The scouting thought process is deliberate, inquisitive, and persistent. The following are examples of the process:

- Check a town for enemy tactical signs, flags, command vehicles, and antennas.
- Check road junctions for tactical road signs and vehicle tracks.
- Check the areas of high elevation for antennas and relay stations.
- Check open areas for artillery.
- Scan woodlines for movement, dismounted troops, and sunlight reflecting off windshields or headlights.
- Check bridges for engineer activity.

At all times, a scout thinks, "What would I place here if I were the enemy?" And once he sees something, he waits patiently and gives the situation time to develop; then he reports quickly and accurately. Important vehicles may move into the area, and this information will help higher headquarters determine the nature of the enemy's operations.

The patrol also moves to different vantage points and dismounts to observe enemy activities from different angles. At the first location, for instance, scouts may see only one tank, but from the second they may see two more. Because commanders base their decisions on information the scouts gather, the patrol leader makes sure that information is accurate and thorough.

The enemy situation and the terrain always dictate the best methods to use for maneuver. Scouts must make the terrain their ally, because they will have few other friends on the battlefield.

Although German doctrine dictates that large towns be bypassed, the mission and the route of march may require a patrol to move through certain towns. When going into a village or town, the patrol leader must make sure his vehicles are close

The patrol leader and his RTO prepare the order.

together (50 meters) and properly spaced. The first vehicle does not wait at the town limits for the second vehicle, because this will place the first one in danger of sniper fire from the outlying buildings. The patrol's motion is fluid and uninterrupted. The order for passage includes the route through town, speed, distance between vehicles, locations of near and far side rally points, hatch position (open or closed), direction of weapons, and actions at the far side of the town.

A contingency plan for the second vehicle is also issued in the event something happens to the first one. The line of sight between vehicles is maintained. If they are too far apart to support each other, especially around curves and buildings, they can be engaged and destroyed piecemeal.

Drivers and track commanders look for the enemy's tactical signs in towns while the soldiers go into a low crouch to present less of a target for snipers. Rear scouts observe obliquely to opposite sides of the street.

Once the patrol has reached the far side of town, the lead vehicle does not expose itself but halts, dismounting scouts if necessary, scanning the area to the patrol's front. The second vehicle orients its primary weapon to the rear while the scouts observe left and right. In this manner, 360-degree security is maintained.

WOODED AREA

German doctrine also states that the patrol should avoid moving through wooded areas, but again the mission may dictate otherwise. Before entering a large wooded area, the patrol leader issues a contingency order. This order is exactly the same as the one for moving through a town except that the locations of listening halts are included.

Once the patrol is about 200 meters inside the woodline, the vehicles stop, the drivers turn their engines off, and the patrol members remove their CVC helmets and listen for voices, vehicle noises, or sounds of battle. One crew member keeps his headset on and monitors the radio. After 30 to 40 seconds, the patrol leader uses hand signals to order the vehicles restarted.

The lead crew remains alert with the driver watching for mines and vehicle tracks in the road and the patrol leader watching for enemy tactical road signs. He also looks far enough ahead on his map to judge where the next listening halt will be. The patrol can stop before major trail junctions and, if necessary, dismount and clear an intersection.

The patrol moves quickly in a close travelling formation, with a distance of 50 meters or less between vehicles. If the patrol is ambushed from the flanks, it continues on, returning fire and throwing smoke to obscure its movement. If attacked from the front, the patrol returns fire, throws smoke, and seeks a bypass. Under no circumstances does the patrol stop and fight in the woods when engaged by small arms. If it is ambushed, it moves swiftly away from the danger area.

The patrol does not stop for long to clear the far side of the woods. Whether it stops at all is up to the discretion of the patrol leader, who must weigh the danger behind him against the open area to his front. If no enemy is detected, the patrol halts while still concealed, dismounts, and clears the open area to its front. The rear track orients its weapon system to the rear, and the scouts guard the flanks. The front vehicle must not be observed breaking the shadow line but must remain undetected. The patrol leader stops as far as 50 meters before an open area to dismount and clear.

If scouts dismount from the lead vehicle, they make sure they do not expose themselves by running down the middle of a road or trail toward the end of the woodline. They remain concealed, dismounting directly into the woods. When clearing the open area to their front, the scouts avoid detection by staying in the shadows.

If the patrol encounters a disabled vehicle at any time, the track that first observes it issues a short, concise warning—for example, "Action left, disabled vehicle, out," or "Destroyed vehicle, 11 o'clock, 200 meters, out." Immediate action follows. The patrol leader's vehicle moves near the destroyed vehicle. The assistant patrol leader moves forward to overwatch, dismounting his scouts as the terrain dictates to establish security. The assistant patrol leader turns his engine off and listens while his driver monitors the radio.

If there appears to be action near the vehicle, the patrol leader opens fire. His vehicle then halts and its engine is turned off. The patrol leader dismounts with two scouts and observes the area for booby-trapped items. Weapons are moved away from the dead or injured and collected in a pile to be destroyed when the patrol leaves. The vehicle is rushed by the patrol leader and his scouts. They enter it in more than one place—through the rear hatch and either the commander's hatch or the driver's hatch. In the case of a wheeled vehicle, the patrol members rush the passenger compartment from both sides. The patrol members, through rehearsal, can ensure that their areas of fire or search do not cross.

DESTROYED VEHICLE

While the search is being conducted, the .50 caliber machinegun is manned by the vehicle's RTO, who is listening for movement and providing local security. He also secures the rear of the patrol's area, while the driver monitors the radio.

The destroyed vehicle is thoroughly searched. If bodies must be moved, the patrol makes sure they are not booby-trapped. One man always provides security, and the patrol members always have writing materials for recording information. Items of interest to the patrol are vehicle markings, radio frequencies, weapons found, uniform information (nationality, branch, rank), ammunition and foodstuffs, recent activity, and maps.

Any bridges the patrol encounters must be cleared in an expedient manner when time is short, which is most often the case when a patrol is forced to move quickly to its objective.

The most basic element of a hasty bridge clearing is security. If the patrol leader has done a thorough map reconnaissance, he should know when he will have to clear bridges before he reaches them. During his map reconnaissance, therefore, the leader should consider the following in detail:

- Possibilities of approaching the water under cover.

Scouts must dismount often.

• Fording sites.

• Cover and concealment for combat vehicles waiting to cross.

• Observation points for detailed observation of the far side of the bank.

When the patrol actually approaches a bridge, the trail vehicle orients its weapons to the rear and the scouts dismount, as necessary, to provide security. The engines of both vehicles are shut off. Scouts from the lead vehicle dismount and secure the near side, stopping before going down the bank to the road or stream below. The front vehicle overwatches forward. As the scouts clear the near side, they check the abutments, stringers, and supporting pillars of the bridge. The Germans emphasize that, if time allows, the supporting pillars under water should be checked for explosives.

When the scouts have finished clearing the near side, they move across the bridge one at a time. The first man across waits and provides security for the second. They then perform the same drill they did on the near side. Once this drill is complete, one scout waits on the far side as the second scout proceeds to clear the area in front of the bridge. The distance is usually not more than 100 meters. Once the far side is cleared, the lead vehicle moves across the bridge, conducts a more thorough clearing of the terrain, and signals the second vehicle to proceed.

The German doctrine for action on contact with inferior enemy infantry is quite clear. If the patrol unexpectedly meets the enemy infantry at close range, it must "penetrate through the enemy" while firing its weapons, at the same time throwing smoke to obscure enemy observation. The vehicles must remain close while fighting through the enemy. As the patrol leaves the danger area, the rear track orients its weapons to the rear and watches for any possible mounted counterattack.

When the reconnaissance patrol comes upon superior dismounted forces, such as infantry with antiarmor weapons, its actions are determined by whether or not the patrol has been detected. The patrol members are never to fire unless they are fired upon.

If detected, the patrol fires and throws smoke, moving away quickly. A general rule to follow when bypassing is to move one terrain feature away from the danger areas. Knowledge of the range of enemy weapon systems can be quite useful. The patrol will then know how far to bypass if the terrain cannot obscure its movement.

When encountering either superior or inferior enemy forces, the lead vehicle radios an alert order to the trail vehicle as to what the patrol is facing. Never should only half of the patrol members be informed of the situation. If the rear vehicle believes, for example, that the patrol has been attacked by a superior force, it will turn around and move away to find a bypass. But if the patrol has actually come upon an inferior force, the lead vehicle will attack through. The patrol will then be split, with the rear track seeking a bypass and the front track increasing its speed and attacking. An alert to the trail vehicle takes only a second and this will keep the entire patrol informed and consistent in its reaction to enemy contact.

The battle drill for a surprise encounter with enemy armor is to move away quickly. Throwing smoke when spotted by tanks at a great distance may serve only to mark the patrol's position. The patrol leader must determine whether or not smoke is to be used on the basis of the tactical situation. If the patrol is not spotted, it is best to dismount and observe, unless there is no available cover and concealment. If the patrol sees only one tank, it takes the time to look for more, because tanks rarely operate alone. One terrain feature can be bypassed or a concealed route used to move out of the range of the main gun. Reports are rendered quickly and accurately.

Barriers or obstacles that are detected early enough are always bypassed. If the patrol has time, it observes for any enemy activity and reports on the specifics of the barriers. The *Bundeswehr* expects the enemy to cover barriers with fire, thereby increasing the value of the obstacle. Barriers can be

expected to be booby-trapped and any mines to have anti-handling devices. Crews must be aware of changes in the shape, color, and condition of the soil. Further, they must be alert to changes in the condition of the grass, if there is any, and to wires on the ground. If the patrol is surprised by superior enemy forces, however, it returns fire, throws smoke to conceal its movement, and bypasses the obstacle.

In any combat situation, the death of the leader is a traumatic event for a small element. If a unit is ambushed and the leader dies, the reaction must be immediate. The patrol returns fire, moves swiftly away from the danger area, reports to higher headquarters, reorganizes, and continues its mission.

The most important step when a patrol leader is killed is to get the word to the assistant patrol leader. The senior ranking soldier assumes command of the patrol leader's vehicle, lets the assistant patrol leader know what has happened, and continues his radio transmission until the assistant patrol leader acknowledges receipt of the information. The assistant patrol leader, understanding where the enemy is, issues orders to move away quickly. He then chooses a rally point—usually not more than 500 to 700 meters away, depending on what killed the patrol leader—and informs the other vehicle of the enemy's location. The RTO informs higher headquarters of the patrol leader's death and sends a spot report on what killed him.

Once the rally point is reached, the engines of the vehicles are turned off, and the scouts dismount with M60 machineguns to establish 360-degree security. The .50 caliber machineguns are manned and the new patrol leader and assistant patrol leader review their location and activity. No more than three or four minutes should be taken to discuss a plan of action, including current location, missions to accomplish, and route to the objective.

Principal to the accomplishment of any mission is the patrol's ability to arrive at its objective. Upon reaching the objective, the patrol leader informs his commander that the patrol has arrived and specifies the time.

The overall concept of the actions on the objective follows this general format: The patrol leader informs his patrol that it has reached the objective. The RTO logs this and sends the report to higher headquarters. The vehicles are placed in primary positions, following a quick clearing of the area by dismounted scouts. The vehicles' engines are shut off, the vehicles are concealed and so positioned as to have easy access to the primary avenues of approach. The patrol leader and assistant patrol leader, along with four scouts, move to the best vantage point and set up an OP. Security is established, M60 machineguns are emplaced on the left and right flanks, and the "OP team" begins watching for enemy activity.

Once the OP is in place, the patrol leader places the assistant patrol leader in charge and returns to the vehicles. He quickly establishes secondary and night fighting positions. If he has enough time, he also considers the following:

- Alternate positions.
- Positions for the night.
- Reporting and contact routes.
- Possibilities of placing barriers.
- Observation and effective areas.
- Detailing of alarm posts.
- Manning of radio equipment.
- Behavior in the event of enemy observation.
- Creation of a range card.
- NBC defense measures.
- Camouflage discipline and camouflage work.
- Details of night vision and sighting equipment usage.
- Details on checking identity of personnel.
- Creation of barriers, installation of alarm charges and ground flares.

If he has very little time, he limits his efforts to the following:

- Finding positions for the vehicles.
- Dividing areas of observation, security, and fire.
- Detailing alarm posts and emplacing guards.
- Issuing instructions on alarms and giving contingency plans if contact occurs.

If the patrol leader returns to the OP to help out, one of the scouts takes charge of the vehicles and makes sure the RTO records spot reports and transmits them, quickly and accurately, to higher headquarters. He also ensures that security is established and maintained, and that the positions are improved.

Scout and reconnaissance patrol leaders must always keep the following in mind as they go about the business of training their units:

- Flexibility is the key to success in combat. Scouts must be innovative and exercise tactical initiative.
- Scouts should maneuver as much as possible, because they cannot become proficient and combat ready without considerable practice.
- Reconnaissance does not equate to direct combat. Stealth, security, and proper maneuver are the important elements of a reconnaissance patrol.
- Reports must be accurate, thorough, and timely, because senior commanders base many of their decisions on intelligence gathered by reconnaissance units. Scouts must not exaggerate, but report exactly what they see.
- Ignorance in training results in lessons learned. Ignorance in combat results in casualties.

At the small unit level, we must outsmart and outscout our adversaries. Battles are not won by those who have the most resources, but by those who are the most resourceful.

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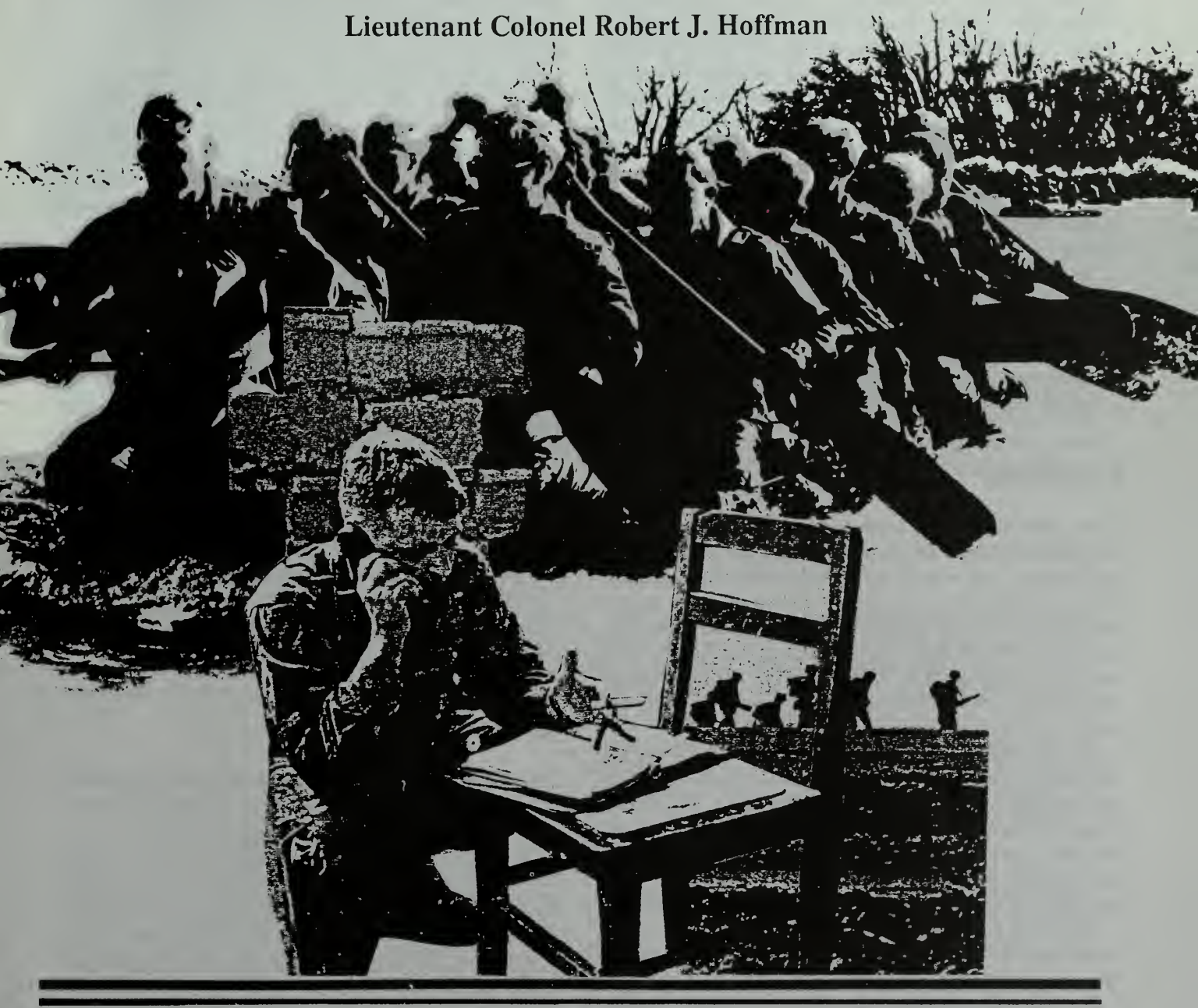
THE RANGER TRAINING BRIGADE

Lieutenant Colonel Robert J. Hoffman



Throughout the history of our country, Rangers and Ranger-type units have served with distinction in both peace and war. Although they have been organized in various configurations, they have always been considered to be among the best leaders and units in the Army.

Today, the Army has a complete Ranger regiment on its rolls. The 75th Ranger Regiment has its headquarters and its 3d Battalion at Fort Benning, its 1st Battalion at Fort Stewart, and its 2d Battalion at Fort Lewis.

Rangers for these units, as well as individual soldiers from other units, were trained by the Ranger Department of the Infantry School at Fort Benning. On 1 November 1987, the Department became the Ranger Training Brigade. Of all the organizational and name changes that have taken place during the past 37 years, this one has been the most significant.

The brigade's mission is to develop the individual and leadership skills of selected officers, noncommissioned officers, and enlisted soldiers by requiring them to perform effectively as small-unit leaders in tactically realistic environments. It does this primarily through the Ranger Course but also through the Light Leaders Course and the Long Range Surveillance Leaders Course. (For a complete discussion of the latter two courses, which are conducted entirely at Fort Benning, see the following INFANTRY articles: "The Light Leaders Course," by Captain William D. Phillips, January-February 1985, pp. 35-37; and "LRSU Course," by William Lyde, Jr., November-December 1986, pp. 37-38.)

Its mission, then, is not essentially different from that of the Ranger Department. The difference is in how the brigade goes about accomplishing that mission.

Traditionally, the Ranger Department was organized in a committee mode. The department's history refers to such organizations as the Coordinating Committee, Platoon Tactics Committee, Combat Conditioning Committee, Benning Ranger Committee, Attack Committee, Defense Committee, and Patrolling Committee. In later years, training at Fort Benning was under the auspices of either the Morgan Team or the Darby Team. Although this approach developed and consolidated the subject matter expertise, it did little to foster a relationship between the trainer and the trainee. In other words, no single Ranger instructor (RI) was responsible for all the facets of a student's training during a particular instructional phase.

When the department was reorganized along the lines of a traditional brigade, instructors were assigned to squads, platoons, and companies of Ranger students, and they became responsible for all aspects of training during each phase. Thus, the end result of each training event could be traced through a specific chain of command.

CONVERSION

The particulars of the conversion were relatively simple. The Benning Ranger Division became the 4th Ranger Training Battalion, with a headquarters and headquarters company (HHC) and five lettered companies. Companies A, B, and C, consisting of two platoons each, train Rangers during the first two weeks of the Ranger Course, which are conducted at Fort Benning. Company D is responsible for the Long Range Surveillance Leaders Course, and Company E trains the students in the Light Leaders Course.

The Mountain Ranger Division, located at Dahlonega, Georgia, became the 5th Ranger Training Battalion, which trains Rangers during the third and fourth weeks. The Florida Ranger Division, at Eglin Air Force Base, Florida, became the 6th Ranger Training Battalion; it trains Rangers during the fifth and sixth weeks. Each of these two battalions has a headquarters company and three Ranger training companies.

(The three battalions were numbered 4th, 5th, and 6th—rather than 1st, 2d, and 3d—to avoid confusion with the three batttalions of the 75th Ranger Regiment.)

In addition to these three battalions, Task Force Desert at Dugway Proving Ground, Utah, has existed for the past year with a small standing cadre, commanded by the deputy brigade commander. Each of the battalions has supplied instructors to supplement this permanent cadre for the last two weeks of the Ranger Course.

Effective 8 March 1989, however, the requirement for Task Force Desert ceased to exist with the activation of the 7th Ranger Training Battalion, headquartered at Dugway. This action will not only improve the quality of life for the Ranger cadre at Dugway, it will further improve training. (Another change presently under study is the expansion of the Ranger Course from eight to nine weeks.)

Dugway's location, terrain, and environment combine to produce a unique deployment and training scenario. The relatively long flight time provides an opportunity for in-flight airborne rigging during both the deployment and redeployment stages. The location enables the Ranger Training Brigade to take advantage of positioning and repositioning JAAT (joint air attack team) aircraft, while the vast, open terrain offers virtually unlimited range use.

At Dugway, the Ranger Training Brigade has developed exceptional live-fire lanes with real-world targets for conducting raids and ambushes and for MILES force-on-force training, all of which has been designed to be a model progressive live-fire program. The students progress from buddy team individual movement training through realistic maneuver Angle T live-fire exercises at platoon level. In short, this final two-week period serves as the "graduate" phase of the Ranger Course, because it requires the students to operate at a high level of excellence. Given the payback in terms of training realism, this is the most cost-effective phase of Ranger School.

The conversion has had a number of other, more subtle effects upon the Ranger Course. First, it reflects the true unit nature of the Army's training programs. Rangers are no longer being trained on tasks that are found only in the Ranger Course. The program of instruction now supports the Mission Essential Task Lists (METLs) of many maneuver units. The standards are those of the 75th Ranger Regiment.

All of the training is conducted with combat as its central focus. The missions that are included in the brigade's METL are used as a way of evaluating leadership, and it is apparently an effective way. Data compiled at the National Training Center has shown that junior leaders who are qualified Rangers perform better than their contemporaries who are not.

PROGRAM OF INSTRUCTION

The Ranger Course's program of instruction is designed to do two things: Train an individual to be a technically and tactically competent Ranger, and train an individual to be an effective small-unit leader. If he completes the course, a student will be proficient in infantry skills; he will understand how to train others; and he will understand the difference between the roles and responsibilities of officers and those of noncommissioned officers. Performance-oriented training is stressed and the RIs serve as role models for the students.

All of the ranger training is exportable to the field. For example, in the desert phase all of the platoons conduct five live-fire exercises. The intent is to teach the Rangers how to set up and conduct this valuable training when they return to their units.

The training program is built on three foundations: physical conditioning, individual skill development, and unit development.

To complete the course, a soldier must be at an above-average level of physical conditioning even before he begins the training program. When all of the students take the Army Physical Fitness Test (APFT) on Day Zero, they are required to do 52 push-ups, 62 sit-ups, and run two miles in 14:54. These scores represent the 70-point level for the 17 to 21 age group on the APFT. In addition, the students must do six chin-ups.

RANGER TRAINING BRIGADE

METL

Movement to Contact
Airborne/Air Assault
Raid
Ambush
Defense (includes hasty and perimeter defense)
Reconnaissance and Security

Physical training sessions are conducted each morning on Days 1 through 4. The students learn how to conduct a PT session that will produce a desired training effect. The training emphasizes proper warm-up, circuit training, and improvements in push-ups and sit-ups. Each day the students also complete a run of three to five miles at an eight-minute-mile pace, which is following by a cool-down period.

The students learn how to conduct a road march, and during the Benning phase they do both a 5-mile march and a 12-mile march. During each of the other three phases, extended movements are part of the tactical training. This training emphasizes how to prepare the feet, the importance of trading off heavy equipment, the importance of hydration, and the role of leaders during movement.

Other physical conditioning events include a confidence course, an obstacle course, and hand-to-hand training. The effects of the physical challenges during the eight weeks are increased because of the limited sleep time the students are permitted as well as the reduced amount of food they are given.

LAND NAVIGATION

In the area of individual skill development, the second foundation for the course, land navigation is of major importance. Land navigation skills are a prerequisite for admission and, after a day of refresher training, Ranger students must successfully complete a day land navigation course.

The brigade also teaches the techniques of reconnaissance, raid, ambush, and movement to contact at both the squad and the platoon level, while during the Dugway phase the emphasis is on live-fire training management. A considerable amount of the training is conducted during the hours of darkness.

Other general subject areas include fire support planning, infiltration and exfiltration techniques, and communications. The students receive a basic survival class during the Benning phase, and this is supplemented by environmentally specific training during each of the three subsequent phases. In addition, the 5th Battalion teaches mountaineering techniques and the 6th Battalion teaches waterborne operations.

A key element of the third foundation, unit development, is building unit cohesion and bonding. This is accomplished in a number of ways. Ranger students are assigned to a squad, platoon, and company and stay in the same unit throughout the course. And the students learn to develop unit SOPs and to see the importance of working together daily as a team. (One of the purposes of the PT program is to begin the bonding process.)

Other aspects of unit development include an emphasis on performance-oriented training, live-fire training, force-on-force training with MILES devices, leader role modeling, and planning integration. Since all the training is done at squad or platoon level, the brigade no longer refers to a patrol as an organization—it is now a squad or a platoon that conducts a reconnaissance patrol, for example.

Although the brigade emphasizes training rather than evaluation, the latter remains an integral part of the training strategy. In addition to successfully completing three of the four runs (including the five-mile run) and passing the day land navigation course, the students must also pass three other evaluations:

- Leadership evaluations on each tactical mission.
- Three confidence tests.
- A peer evaluation in each phase.

Students must receive a "go" on at least one-half of their leadership evaluations, must pass at least one primary leadership evaluation (squad leader, platoon sergeant, or platoon leader) and at least one evaluation in the Florida phase and one in the Dugway phase.

CONFIDENCE TESTS

Two of the mandatory confidence tests are conducted at Fort Benning—the water confidence test and an obstacle course. The water confidence test consists of two events. First, a student must climb a 40-foot ladder, walk 60 feet across an 18-inch-wide plank over the water, commando crawl and monkey crawl along a rope, hang free from the rope, and drop 40 feet into the water. In the second event, he must climb an 80-foot ladder, hang from a pulley attached to a cable, and slide down the cable until an RI signals him to release the pulley. He then swims to the side of the pond.

The obstacle course, called the Darby Queen, consists of 25 obstacles spread out over 2,000 meters of broken undulating terrain. The first 24 obstacles are the standard Army confidence course obstacles; the 25th is a 40-foot cargo net.

NOTES TO COMMANDERS

Give your soldiers a better chance of succeeding in the Ranger Course by preparing them in advance and by carefully choosing which ones to send.

• They must be mentally committed to dealing with 58 days of rigorous training.

• They must be used to marching distances of 5 to 12 miles with loads of up to 60 pounds.

• They must be proficient in land navigation.

Carefully screen your enlisted soldiers, especially those below the rank of sergeant. The Ranger Training Brigade teaches warning orders and operations orders, but experience has shown that privates first class and corporals have a lot of trouble in this area.

Regardless of rank, soldiers who do not have a strong desire to graduate from Ranger School have a low probability of success.

The third confidence test, conducted in the mountains, is a 200-foot rappel at night. A soldier's failure or refusal to participate in any one of these three tests results in his dismissal from the course.

The peer evaluations, conducted at the conclusion of each phase, require each student to rank the other members of his squad, write a narrative discussing each individual's strengths and weaknesses, and make a recommendation for his final status (honor graduate, graduate, recycle, or drop).

A numerical score on the peer report is assigned to each student, and those whose scores fall below 60 are considered "peer failures." These records are carefully reviewed, however, because a "peer failure" may be a good student who happens to be the weakest member of a strong squad. Such a student is easy to identify from the comments in the student narratives. The narratives also help identify any student who may perform well only when an RI is present. All peer failure students are moved to a new squad for the next phase.

Of the five critical evaluations, the Ranger reorganization has had the most effect upon the leadership assessment program. As noted, unless they have failed a peer evaluation, Ranger students are assigned to the same squad, platoon, and company throughout their training. One, two, or three RIs are assigned to each squad in each phase. Under the small-group instruction concept, these RIs conduct all the training for their squads, using the *talk, crawl, walk, run* approach.

To ensure standardization within a phase and among the various phases, the Ranger Training Brigade's Mission Training Plan (MTP), published in June 1988, is used. Standardization is reinforced by periodic commanders conferences and staff and instructor visits to the battalions.

The emphasis is always placed on doing it right the *last* time, and an after-action review (AAR) is conducted after each significant event. The RIs are trained to focus their AARs on how to do the task correctly, not on what the students did wrong. If a squad or platoon does not meet the standard, the RI coordinates with the opposing force to redo the event, either on the same terrain or close by. The intent is to finish all training events on a positive note.

Another significant adjustment is recycle training. Historically, a student who failed to meet a standard in Ranger training was returned to his unit. The only students recycled were those who were medically unable to stay in training. In contrast, recycles are now offered to all students who fail to meet a standard the first time through. Today, a comprehensive recycle training program is a part of each phase. The program includes physical training, map reading, warning order and operations order development, and tactical training.

All of the personnel assigned to the Ranger Training Brigade as instructors must complete a certification process before they can train or evaluate students. This three-phase program includes education, hands-on practice, and board certification. In Phase 1, the prospective instructor must become familiar with all of the brigade and battalion SOPs, the Ranger Training Brigade MTP, the Ranger Handbook, and all safety and emergency procedures.

During Phase 2, he is exposed to the student evaluation system, performance-oriented training, after-action reviews, and counseling techniques. He accompanies an experienced RI on several leadership assessment training exercises, and sits in on all small-group instruction.

Finally, in Phase 3, he presents sample periods of instruction to a board made up of experienced RIs and is evaluated in the field during a training exercise. In addition, each certified instructor is evaluated once each quarter by his chain of command. This program provides a high degree of competence and standardization for the brigade's courses.

The name and the organizational make-up have changed, but the end result remains the same. The Ranger Training Brigade trains 50 weeks of the year, seven days a week, to accomplish the mission of producing top quality leaders for the Army.

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Infantry In Action

The Sieg River Incident

MAJOR THOMAS H. JONES

EDITOR'S NOTE: The following article is a slightly edited version of one that appeared in the October-November 1960 issue of INFANTRY, pages 14-17.

The author entered the Army in 1943 and served in Europe as an intelligence scout with the 78th Infantry Division. He graduated from OCS in January 1946.

Violating the chain of command in establishing this patrol undoubtedly contributed to its failure, but perhaps more important was the patrol leader's apparent inability, or unwillingness, to make sound and timely decisions. This article points out clearly the need for soldiers at all echelons to have that ability and willingness when functioning without specific orders.

Decisions are made at all levels. Books have been written about the decision to invade Normandy in 1944, and volumes have also been written about the decision to drop the atomic bomb.

On the other hand, little has been said about the many decisions made at the lower echelons of command—at the so-called foxhole level. This is, of course, most unfortunate, since many of these foxhole decisions hold lessons for the student of military history just as great as those on the strategic plane. A good case in point is an incident on the Sieg River, where a decision by an Army private first class (PFC) took on great significance—at least to those who were involved in the episode.

It was late in March 1945. The encirclement of German forces in the Ruhr by American troops neared completion. General Eisenhower's appeal for German surrender was disregarded, and forceful reduction of the pocket of resistance in the Ruhr became necessary. This promised to be a formidable task, because an estimated 150,000 German troops occupied the Ruhr area.

In preparing for the reduction of the Ruhr pocket, American forces needed information about German troop movements within the pocket. The collection plan of higher headquarters involved a series of patrols, each to reach a vantage point from which enemy road and rail traffic could be studied and reported.

This is the story of one of those patrols, sent out by an infantry battalion, and of the decision that confronted the PFC who led it.

The patrol's mission was to penetrate approximately six miles into enemy territory and reach a hill overlooking a major highway intersection. The pattern, intensity, and nature of the traffic was to be noted and, radio range permitting, reported. Otherwise, the information would be delivered upon the patrol's return.

The schedule called for a movement of about four miles the

Members of a World War II intelligence and reconnaissance unit get instructions before going out on patrol.

first night, after which the patrol would hole up during the daylight hours. The second night, the objective would be reached and the night traffic would be observed. Throughout the second day, the traffic observation would be continued. On the third night, the patrol would return to friendly lines (which were expected to be somewhat close at that time).

It was decided that a member of the battalion intelligence section would lead the patrol, since that section had considerable training and experience in patrolling. All four available members of the section volunteered, although one developed a suspiciously sudden hacking cough that caused the S-2 to immediately disqualify him. The acting section leader, a PFC, was ultimately selected to lead the patrol.

The other four patrol members were furnished by the reserve company. A requirement was that one of these four men speak German and that another be experienced in operating the SCR-300 radio. The result was that a sergeant (German-speaking) and a corporal (radio operator), plus two privates, were placed under the PFC's command. However, the non-commissioned officers, upon volunteering, had accepted this situation.

The briefing for the patrol was conducted by the division G-2 section using aerial photos projected on a large screen. German positions, possible approaches, and obstacles were pointed out and discussed. The route finally selected by the PFC led across the Sieg River where it formed a salient into American lines and was said to be lightly defended by the Germans. From there the route climbed to the high ground dominating the river valley; it then paralleled the river to a trail which could be followed to the objective area. A more direct return route was tentatively selected.

In addition to the radio, the patrol's equipment included a small boat in which to cross the Sieg, two "grease guns," two carbines, a pistol, a flashlight, knives, and a garrotte. The men wore OD shirts and trousers, combat boots, field jackets, and soft caps. They carried what food they could stuff into their pockets, principally D-ration chocolate bars. The PFC carried the patrol's only map.

The patrol left at 2100 hours and carefully approached the river. Men from a forward rifle company followed with the boat. Upon reaching the river bank, the first three patrol members embarked and paddled silently across, covered by

the men remaining on the near side. The boat was pulled back across the narrow river by a rope attached to the end and held by the other two patrol members. These two men then completed their crossing, and the boat was pulled back across and carried away by the men of the rifle company.

No enemy troops were encountered during the crossing. The patrol moved out in a diamond formation, the PFC leading, along the route to the high ground. It was quite dark, with the cloud cover permitting only a faint glow in the sky. At one point, German voices in subdued conversation caused a deviation in the patrol's route; at another point, faint lights were given a wide berth.

As the high ground was reached, the patrol swung left as planned. It was already behind the principal German positions pointed out in the briefing. The sergeant then whispered to the PFC that their present course might skyline them to troops below, and the PFC, agreeing, veered slightly downhill. The patrol's stealthy movement continued for several minutes when, very suddenly, and only a few yards ahead, a figure quickly darted toward a small bunker built into the side of the hill.

The figure was two or three steps down the dirt stairway of the bunker before the PFC, leaping forward, was able to grasp his shoulder and yank him back onto the ground. Before the PFC could draw his knife to kill, the German relaxed completely, said "Kamerad" and was a prisoner.

As the patrol closed in, the PFC knew that he had a decision to make. What would he do with this man? And how would this affect his mission?

Interrogation of the German through the interpreter, and a brief reconnaissance by the two privates, revealed that the nearest enemy position was less than a hundred yards away. The German stated that he did not expect a relief that night but that occasionally security patrols or wire teams passed his position. He added that since it was late (about 0200), there might not be any additional checks that night. He also stated that he was not required to make periodic reports from the telephone at his observation point.

The interrogation continued as the corporal and the two privates occupied local security positions.

The German revealed that he was an artillery observer, as was the neighboring German position a hundred yards away. Within the cramped bunker, by carefully shielded flashlight, the German pointed out on the PFC's map the positions of the observation post and of his artillery battalion. He strongly expressed a desire to be taken captive and thus trade the danger of his present role in a war already lost for the relative security of an American prisoner of war camp.

Along with all of these factors, the PFC considered the fact that the patrol had a mile or more to go before it reached the planned hideout area. He also knew that the area must be reached by 0400 to ensure time to find a suitable place to hide before daylight.

What to do? Whatever it was, it had to be done fast. Every moment in the present location was precarious. A visiting patrol, the neighboring German position, a phone call, a relief, an unexpected check by a wire team—any number of things might disclose the patrol's presence to the enemy.

Of course, he could abandon his mission and take the prisoner back to American lines. But this went against the first

A World War II infantry platoon crosses a small German river.

duty of a soldier, and besides, forward area prisoners were a dime a dozen at this time. He could send the prisoner back with two of his men and continue the patrol mission with the remainder; this was tempting but there were disadvantages.

The PFC felt that losing any of his patrol would seriously jeopardize his chances for successful accomplishment of the mission. What's more, it was doubtful that the men he sent back would be able to reach friendly lines before daylight. This course of action would also run the risk of having the prisoner escape. Guarded by only two men, in the dark, in a position where a shot could scarcely be risked, the chances for the prisoner to escape were good.

DECISIONS

Then what about taking him along with the patrol? An awkward situation, with two full days and nights left to go, with every man's full attention necessary for security and observation, and with the ever-present possibility of the prisoner's attempting to escape or sounding the alarm. Also, he might, through clumsy fear or lack of understanding, give away the patrol.

How about leaving him in his position with a promise to see that he was later escorted to American lines? A terrific risk. The German could well be lying about his desire to remain a prisoner. Even if he were sincere at the moment, it seemed extremely doubtful that he would, upon release, deliberately violate his training and indoctrination and refrain from reporting the patrol in the hope that he would be led to safety. Also, he might soon realize that if the patrol were captured and reported his dereliction of duty, things would go extremely hard for him.

Kill him? From the mission's standpoint, this was the best solution. There would then be no danger of the German's talking. Likewise, there would be no danger of his giving away the patrol, and there would be no need to split the patrol. If the prisoner's body was hidden well enough, the Germans might think his absence was just another desertion, and they would not be alerted to the presence of the enemy in the area.

If the German were killed, the PFC would, of course, have to do it. One quick knife thrust and it would be finished. But the German was a legitimate prisoner of war and, by the rules of warfare and of decency itself, he was entitled to the protection of his captors.

The PFC, who had recently celebrated his 19th birthday, had not given much thought during his short life to the ethical course to follow in a clash between mission and morals. He considered it now, however.

The accomplishment of his mission might result in the saving of an appreciable number of American lives and might hasten victory. What, really, did the life of one German soldier weigh on the scale against accomplishment of such a goal? Could he reasonably spare the life of an enemy when that enemy's death might contribute toward the saving of many American lives?

On the other hand, when a man fights for certain principles, is he justified in disregarding those principles for the duration of the fight? All of these thoughts must have flashed through the PFC's mind with a rapidity induced by the demands of the situation. It is doubtful that he considered consciously all of the factors mentioned. Nevertheless, the essence of the foregoing "estimate of the situation" guided his decision, a decision formulated in the very few moments spent interrogating the German prisoner.

Initially frustrated by the complex and contradictory issues, the PFC asked the American sergeant for his ideas. There was no help forthcoming, however. The decision was strictly up to him. A 19-year-old PFC had a decision to make which could conceivably affect the length of the war, a matter involving perhaps thousands of lives.

Finally, he made his decision. The German was told that the patrol would return that same night and that he would be picked up at that time and taken to the safety of American lines. He was further told that it was, of course, necessary to bind and gag him to ensure his good behavior pending the patrol's return. The PFC hoped, somewhat forlornly, that the misinformation given the German might mislead the enemy as to the patrol's projected actions.

HIDEOUT

Upon leaving, the patrol cut the telephone wire and dragged it for several hundred yards. The PFC felt that there was less danger in risking a wire crew's checking a break than in the German sergeant's freeing himself sufficiently to use the telephone. Hopefully, the PFC also radioed the coordinates of the German bunkers back to the artillery battery shortly after his patrol cleared the area.

The patrol's movement to the hideout area was uneventful. The first rays of sunlight were beaming over the eastern horizon as the men took positions in a wooded area to spend the long day in anticipation of the night, at which time they would move again. Shortly after dawn, however, strong German patrols began searching the vicinity of the hideout. It was not long before the American patrol was found and taken prisoner. Eventually, it was learned that the German had been discovered by his own troops. Unbound and released, he had immediately initiated a vigorous search for the patrol.

As the PFC was later marched back toward friendly lines in a column of war prisoners, he realized that he had probably made the wrong decision. However, as the column passed the familiar area where the German bunkers had been, the PFC was able to smile weakly at the sight of huge shell holes where the German bunkers once had been.

Although this is the end of this true story, there seems to be more that could be said—and perhaps more that could be learned from this isolated, seemingly insignificant experience of fifteen years ago. Does it have any application today? I think it does.

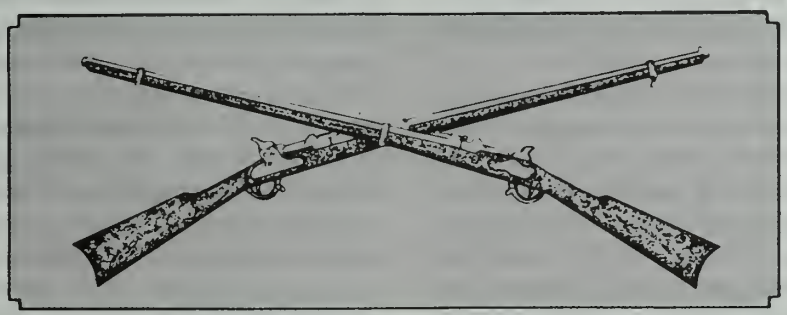
In retrospect, it would seem that the PFC made the wrong decision. But was there a "right" or a "wrong" decision? Perhaps not. The point is that a decision had to be made. In its own way, it was an important decision in its consequences.

The question then arises. "Was the PFC properly equipped to make that decision?" For that matter, are the other PFCs and lower-ranking enlisted men in today's Army ready to assume the same kind of leadership if and when the time comes? Or is our training geared to that eventuality?

In many instances in the future, a key decision may again lie in the hands of a private or PFC in the rear echelon. On a nuclear battlefield, this is more than a remote possibility. If the PFC is the only survivor who is physically able to make a decision in a situation, the lives of many others may depend on how well he has been prepared for battlefield leadership.

The Army operates on the theory that leaders are made, not born. Leadership can, in part, be taught. To the extent that it can be taught, it *is* being taught to those whose normal positions demand leadership. However, in view of the fact that any soldier may be called upon to exercise leadership (as it was exercised in this example), would it not be wise to teach and emphasize to *all* men the principles which we use as guidelines for leadership? Furthermore, would it not also be wise to give these men an opportunity to practice leadership and initiative in their daily duties and in tactical exercises? Or should we continue to limit our leadership training to NCOs and potential NCOs?

Even if the average private is never thrown into an abnormal situation requiring an important decision from him, an understanding of the principles of leadership—of the fact that it may sometimes be necessary to make difficult or unpopular decisions—will make him a better follower, and will help prepare him for the day when normal promotion demands that he assume leadership on the battlefield.



PAST TIMES

GET OUT OF TOWN

Lieutenant David J. Daze

EDITOR'S NOTE: This is another in our continuing series of PAST TIMES pieces—articles selected from earlier issues that present combat lessons learned. We feel the lessons presented in this series have considerable relevance for today's Infantryman.

This particular piece originally appeared in the October 1957 issue of the INFANTRY SCHOOL QUARTERLY, pages 46-49. The author fought both as an enlisted man and as an officer with the 3d Infantry Division in Italy, France, and the Rhineland. He was seriously wounded and was retired from the Army in September 1945.

Many a Westerner is lying under the sod of "Boot Hill" because he did not heed the ominous warning, "Get out of town!" And many a soldier—of many a nation—is lying under a white cross because he too failed to "Get out of town."

Towns can be deathtraps, especially for small units. Many men have been captured or massacred because they were boxed in and unable to use their weapons in self-imposed traps. Squads and platoons have invited disaster by huddling in cellars for warmth or companionship, with only a guard or two at street level. These guards would be picked off or driven back in upon their comrades. Then the whole unit was helpless, unable to move, shoot, or see. Several times I narrowly missed having all or part of my own unit suffer this humiliating fate. And this was not the result of ignorance—it was softness. I simply didn't exercise the self-discipline or toughness required to force exhausted men out into the weather.

It would be foolish to say that towns or smaller built-up areas are indefensible. History contradicts such a statement. Where the terrain and the town permit the primary consideration of observation and fields of fire, adequate defense is possible. Also, there are times when the rubble of stone buildings makes a fairly good fortress. Battered hilltop villages in Italy and North Africa proved this. The rubble that may follow in the wake of atomic weapons can also be put to good use, by units of the triangular division or by new, fast moving, pentomic infantry and airborne units. However, an inhabited area should not be used unless the unit is large enough (or the town small enough) for most of the houses on the outside perimeter to be physically occupied. And every man must have a firing port with some field of fire.

The important point is to make proper use of terrain in establishing the defensive position so that maximum advantage is taken of the best observation and fields of fire available. There are very few instances where the immediate countryside would not offer a far better battlefield, assuming the unit had some chance to dig in. It is much easier for the enemy to lob a grenade into a room than into a foxhole. A few ricocheting .30 caliber or 7.62mm slugs can play havoc in stone rooms while they would pass harmlessly over heads elsewhere. Very few roofs give protection against medium artillery and the concussion inside will burst eardrums. Tank fire can turn the occupants of a house into mincemeat.

These things have happened countless times—there is nothing theoretical here. It is the nightmare of a lone guard sitting sleepily at a window, or standing peacefully in a dark doorway while his companions confidently cook, dry clothing, or sleep that brings shudders to troop commanders. Men in such a situation simply haven't a fighting chance. One small patrol or ranger-type element of the enemy can slaughter a larger unit. Or in a general attack, the individual guards at the various houses may be the only ones who can get into action with any real success. The rest of the unit may be helpless. One house

United States World War II infantrymen enter a town in Germany in April 1945.

can be seized by the enemy, putting a wedge in the entire line and opening a corridor into the vitals of the command. Other occupied houses can be outflanked, cut off, screened, or generally made useless. A friendly counterattacking force would operate at a clear disadvantage.

The greatest percentage of urban habitation (United States excluded) is clustered in small villages. All of Europe, North Africa, and the Orient where the American soldier has fought and may have to fight again, follow this pattern. But this is not necessarily a liability. Villages can be both a comfort and a joy—if used properly. By properly, we mean "get out of town," especially by sundown, or at least get all or most of the fighting element out. Then, after the unit is dug in, small segments may be allowed to return.

Let us assume a situation that occurred many times in World War II and Korea, and, with greater emphasis on dispersion for the atomic battlefield, can be expected to happen many times again. A reinforced company or task force has seized its objective—a hill or a crossroads straddled by a small village of 30 or 40 buildings. The commander's orders are to hold until the situation develops or until neighboring areas are mopped up and orders to move are received. Friendly units are not in physical contact; the enemy in the area is relatively weak but active. Counterattack by the enemy is possible, but the threat is not too serious. The weather is cold, with intermittent sleet and snow.

Such a situation is elementary. The solution also—adequate defense, proper patrolling, and the like—should be elementary. However, several important considerations and principles can be illustrated in this familiar situation. These can be applied with slight modifications to any branch of service, in any town, in any war.

First, the company (task force) commander could insure the safety of that particular night by driving his entire command out into the snow. But this would do little for the morale of men who failed to understand, and would do nothing to end the fatigue of long combat or to save strength for the miserable days ahead. In any event all riflemen and machineguns should be sent outside the perimeter of the buildings themselves (only a few yards may suffice) where a proper defense should be dug in. All tanks, personnel carriers, supply vehicles, and mortars should be emplaced in support among the buildings or in concealed areas (woods) within the perimeter.

After the line is secured, outposts established, and the usual defense procedures followed, a percentage of the men could be allowed to leave their holes to seek the shelter and comfort of neighboring "warming houses." Some men could be allowed to sleep indoors if their fields of fire from windows or cellars can support their platoon. Approximately one-third of the men at a time could leave the line. If the weather is particularly foul, and the enemy potential slight, possibly up to one-half could seek warmth, shelter, and food. But never, in any tactical situation, regardless of fatigue or supposed freedom from attack, should any commander allow more than 50 percent of his men to abandon the cover of their holes. And never should noncommissioned officers be allowed to leave their commands in greater ratio than their men.

Commanders themselves must be cautioned. The biggest, richest homes and the large villas are usually on the edge of town or even slightly removed on a nearby hill. Any leader who succumbs to the lure of palatial quarters on the outskirts of his command, where he can be cut off or pinned down, is a fool and a poor soldier as well. Any substantial building or cellar near the hub of the village is his proper place. There the lights and activities of the message center will be masked, patrols can be briefed, the command function can best be carried out, and the command post best guarded.

Proper use of a populated area can make it a godsend. If mishandled, it becomes a trap. But so far as the fighting elements are concerned, heed the warning, "Get out of town!"

TRAINING NOTES

ITV Gunnery Training

CAPTAIN TERRY M. HENRY

For too long now, TOW training has emphasized the use of the M70 trainer to develop tracking skills. This emphasis stems from the fact that the M70 generates a numerical score, and some believe that this can be used to separate good TOW gunners from bad ones.

In April 1984 the Infantry School distributed FC 23-34, Interim TOW Training Plan, which cited two independent studies conducted on the TOW weapon system and the state of training at that time. Both tests revealed that there was no direct correlation between M70 scores and live missile hits, and that gunnery conditions with the M70 were unrealistic. Following the publication of FC 23-34, units began taking steps to improve the overall training for their TOW crews by concentrating on integrating tracking and missile gunnery training into tactical training.

Unfortunately, subsequent training publications issued by the Infantry School have failed to follow up this concept. The tasks listed in FM 23-24 (Test) and FM 23-34, for example, read more like tactical tables than integrated tactical and tracking training.

The 1st Battalion, 36th Infantry, 3d Armored Division, has designed a new training program to improve the technical proficiency and tactical gunnery skills of its M901A1 ITV crewmen from individual through platoon level. This program is a drastic departure from the previous training plans for TOW crews.

Under this new concept, the focus of the battalion's ITV gunnery program is two-fold: First, it is aimed at training and sustaining the technical proficiency and tactical gunnery skills of individuals, crews, and platoons. Second, it establishes standards under which individual through platoon level gunnery can be evaluated periodically and systematically.

To achieve its first goal, the program uses the crawl, walk, run method. Each gunnery table requires the use of different skills or an increased level of difficulty in the skills already developed. Each table builds upon the previous one.

The progressive levels of the program are basic, intermediate, and advanced. Thus, Tables I through V are used for training basic gunnery techniques and engagements; Tables VI through VIII for intermediate gunnery; and Tables IX through XIII for advanced gunnery. Tables V and VIII are the "gate tables" that allow progression to the next level of gunnery. (See accompanying list of tables.)

The ITV tables were patterned after the Bradley gunnery tables. In a division equipped with M1 Abrams tanks and M2/M3 Bradley fighting vehicles, therefore, this allows all the combat vehicle commanders to speak the same language. Table VIII is used for vehicle and crew qualification for the tanks, Bradleys, and ITVs, and Tables X and XII for section and platoon qualification.

The second objective of the program—

ITV GUNNERY TABLES

Table I	Ground Mount MILES Range (Practice)
Table II	Ground Mount MILES Range (Qualification)
Table III	Gunner's Hand Control Manipulation and Range Card
Table IV	ITV MILES Range (Practice)
Table V	ITV MILES Range (Qualification)
Table VI	ITV Crew/Squad Base-line Exercise
Table VII	ITV Crew/Squad Combat Course (Practice)
Table VIII	ITV Crew/Squad Combat Course (Qualification)
Table IX	ITV Section Combat Course (Practice)
Table X	ITV Section Combat Course (Qualification)
Table XI	ITV Platoon Combat Course (Practice)
Table XII	ITV Platoon Combat Course (Qualification)

Improved TOW vehicle equipped with MILES fires at a target down range during training.

to evaluate individual through platoon level gunnery—is easily achieved through the task, condition, and standard established by each table and firing task. Categories of qualification have been outlined so that commanders can assess the gunnery proficiency of their gunners and crews.

Recently, there have been many new ideas in TOW training, including a recent one in INFANTRY (see "TOW Training Strategy," by Major Anthony DiStephano and Sergeant First Class David L. Boulden, July-August 1988, pages 33-34). None, however, put enough stress on the gunner and the crew, nor do they replicate battlefield conditions realistically. Under the gunnery program outlined herein, a gunner is qualified (has completed Table V) after he has fired a total of 143 missiles, 55 percent of them at stationary targets and 45 percent at moving targets. If the gunner fires only the ITV gunnery tables (III,IV, and V), he will fire 83 missiles for qualification.

The scoring is derived from a matrix that is based on time, as in the Bradley tables. Generally, the time begins when a squad leader starts his fire command and ends when the target is destroyed. The standard of 30 seconds that is used corresponds to Soldier's Manual task #071-316-4053, Engage a Target with an ITV TOW-2 Dual Launcher. More points are awarded for engagements that take less than 30 seconds.

In addition to the time factor that gunners must deal with, multiple target engagements and reloading exercises must be executed while targets are being engaged. The crew and squad qualification tables as well as the advanced gunnery tables are conducted under increased stress and simulated battlefield conditions.

Not every piece of ground offers adequate ranges for realistic TOW engagements, of course, but scaled-down targets can be used in much smaller spaces to achieve the same training objectives. The gunnery conducted by the battalion to date has been partly on a one-seventh scale MILES range. Using the personnel-size Theissen target mechanisms fitted with MILES target interface devices (TIDs), the battalion fabricated armored vehicle silhouettes and placed these on targets. At ranges of 300 to 500 meters, the silhouettes appear as actual vehicles would at distances of 2,500 to 3,500 meters. A BT-37B trolley system permits the use of moving targets on the MILES range. In all, the battalion needs only one square kilometer of ground to conduct its training with Tables I through VI.

Day, night, and NBC firing tasks are integrated into the battalion's gunnery tables. By trial and error, AN/TAS-4A night vision goggles were collimated to the MILES daysight/trackers for the night firing tasks. Sunlight allowed degraded gunnery during the day without thermal heating devices, but cooler night temperatures required some type of heating devices for the target silhouettes.

All of the ITV gunnery tables can be fired with full-size silhouettes or with the scaled-down versions. Tables I through VI are base-line tables and, theoretically, can be fired on any existing small arms range, once the targetry already on the range is fitted with scaled-down targets and the MILES TIDs. The maneuver tables, VII through XII, could be fired on Bradley or tank/CALFEX ranges if they were fitted with the proper targetry.

Because of the cost of live TOW missiles, this program uses the MILES system only, which can realistically duplicate almost every aspect of live firing. ITV gunnery training, however, should culminate in the firing of a service missile on a live fire range. This training should take the form of a proficiency course that combines several maneuver tasks, small arms engagements, and live missile firing. This type of course forces a gunner to fire his missile in a combat scenario rather than in a sterile environment.

This program is not meant to be an answer to all TOW training deficiencies, but it does move ITV training in a new direction. It takes gunners and crews away from the sterile environment of M70 trainers and static firing ranges and puts them in tactical situations under realistic conditions. The program has greatly improved our soldiers' motivation and interest in their training, and it will lead ultimately to an increased killing potential for our antiarmor vehicles.

Captain Terry M. Henry recently completed an assignment as commander of Company E, 1st Battalion, 36th Infantry. He is now attending the Infantry Officer Advanced Course. He is a 1982 ROTC graduate of Indiana University of Pennsylvania.

Aerial Photographs

SERGEANT FIRST CLASS JOHN E. FOLEY

Aerial photographs can be valuable to an infantryman. They can update and supplement the maps of the area in which he is operating, and they can help him interpret his maps and get a real-life picture of the ground.

For example, on one map of a training area on the island of Molokai in Hawaii, a large area appeared to be clear ground with many trails. When an aerial photo was obtained, though, it showed that the bare area was covered with pineapple plants. This meant a seasonal agricultural change to the map. (Before the plants matured or after the fields were harvested, movement in the area would be unrestricted. In between those times, though, the mature plants would be too high to step over, would be very tough, and would have razor-sharp edges.) In addition, the aerial photo showed some buildings that were not on the map.

But if you're a battalion S-2 NCO, where do you get such pictures? If you're lucky, you can request photos from your battalion S-2, who can obtain them from your brigade or higher, which in turn can get them from Army or Air Force professionals. You can even request a specific mission and get photos of the exact areas you want. (See "Aerial Photography," by Captain Eugene J. Palka, INFANTRY, May-June 1987, pp. 12-13.)

If the S-2 is unsuccessful, though, you're on your own, and this was my problem when I was asked for photos of the training area on Molokai for a battalion FTX. The S-2 section didn't have any such photos and, much to my surprise, didn't have any conventional means of obtaining them. Then Field Manual 21-26, Map Reading, came to our rescue. Chapter 8 of the manual deals with aerial photography.

After studying that chapter, we borrowed a 35mm camera with a 150mm telephoto lens from my wife, trained a scout team, and hitched a ride on a helicopter going over the area. We could have obtained a camera from the Training Support Center (TSC) photo section, but I preferred to use my own. (With the growing popularity of photography, you may be able to find an enthusiastic amateur photographer or two in your battalion.)

VARIETY

In studying the field manual, I was amazed at the wide variety of photographs. For "do-it-yourselfers," though, the basic ones are the following:

Vertical. This type will most closely duplicate a map, since you take the shot looking straight down. (If you do this yourself, be careful and strap yourself down so you won't fall out of the helicopter in flight.)

Horizontal. This type is not covered in the manual, but it gives a better appreciation for the terrain in certain instances, such as looking straight ahead at the side of a cliff.

Low Oblique. A low oblique photograph does not show the horizon, and the view is similar to what you would see looking down from the top of a hill or a tall building. No scale is applicable to the entire photo, and distance cannot be measured, but it can be used as either a supplement to or a substitute for a map. A low oblique shot of a town, for example, is useful in planning a raid or an encirclement—with a recent aerial photograph you get the latest update as to what is on the ground.

High Oblique. The horizon is always visible in this type of photo, and the photos we have taken are mostly in this category. Scale and distance cannot be measured for the same reason they can't in a low oblique photo. But we have obtained excellent results with this technique.

Experimenting with various types of film, we found that ASA 200 color film was good. We found ASA 100 black and white film disappointing, but ASA 400 black and white probably would have been better. The color photos really show up the terrain features and the differences in the terrain. Post TSCs can develop color, but it may take a while; since I was in a hurry, I took the film to a commercial developer and had the pictures the next day.

Specialized film is available if you have access to normal aerial photo supplies. With infrared film, for example, you can take photos at night if a source of infrared radiation is available. This film can detect artificial camouflage materials, although a special camouflage detection film is also in the inventory.

An aerial photo is just a nice picture, though, if you don't also collect certain information about it—place, time, direction, altitude, and the like. With Army or Air Force photography, this information is included on the photos, but if you're going to do it yourself, you will need a two-man team—a photographer and a recorder.

We covered a map with acetate and

The size of the central feature in a high oblique photograph such as this one can be compared with its size on the map to obtain an estimated scale.

mounted it on quarter-inch plywood. This ensured that the map wouldn't blow around during flight and gave the recorder a surface to write on. To simplify things further, we wrote in an alcohol marker directly on the acetate. In planning, we circled the general areas we wanted to photograph, and tried to include landmarks such as a lake or a cut in a road.

For accuracy, we recorded the following information:

- Film roll number.
- Frame number.
- General grid location of the area (simplified by circling the area on the map and marking it with the roll and frame numbers).
- Time and direction of the shot.
- Type—high or low oblique, vertical, or horizontal.
- The altitude of the aircraft.

A typical shorthand note would look like this: Roll #2, FR 1, Area #25, 1100 hrs., N, LO, 2,000 ft. This translates as Roll #2, Frame #1, Target area #25 (a village or hilltop), 1100 (the time the photo was taken), the photo is looking North, and it is a low oblique shot taken at 2,000 feet. While we had to work together at a high rate of speed, we tried to be as accurate as possible.

With a good plan and good teamwork, you can make a strip of pictures to show a large area, or you can get the shots you need of objectives for raids. Needless to say, the person handling the camera must be competent enough to take good pictures, because blurred photos are of little use.

You also need to give the pilots of the helicopter a map with your flight route and targets marked just as they are on the map you are using. This makes it much easier for both you and the pilots to go where you need to go without wasting time. When requesting helicopters, also ask for extra headsets and microphones to enable the photographer, recorder, and pilots to communicate effectively during the flight.

On the subject of scale, it is only the vertical photo that can provide an accurate scale, and Chapter 8, FM 21-26, page 8-8, explains the math more clearly than I can. It also explains the comparison method. With a low or high oblique photo you can get an estimate of the size of the central feature of a photo by comparing it to the map. In the photo shown here, for example, the lake is approximately 280 meters wide on the map; on the photo it is about 3.5 inches wide. This works out to a scale of one inch to 80 meters, and this ratio worked out on the ground as well. Again, this works only for the central feature of the photo; we did not try to apply the scale to the entire photo.

When you conduct your own photo reconnaissance missions, you will have a great deal of flexibility in getting exactly what you want, and you can do custom work such as getting shots of the same location from different directions. This would be especially advantageous in a low-intensity conflict, or when planning a raid or an encirclement. In one instance, for example, we took a low oblique photo of an area looking northwest and down an extremely steep slope and a high oblique photo of the same area looking west, which showed the vegetation and the low ground leading to a town.

With photos, you can give your soldiers a better appreciation of the terrain and help them orient themselves on the ground faster, especially when they're going into an area for the first time. Aerial photos from different directions and angles will also help you make accurate terrain models to use in briefing them.

Try it the next time you take your camera to the field. Take some photos as you come back in on a helicopter. Use color film for clarity and contrast, and record what you're shooting. Then compare the photos to your maps and prepare terrain models. In short, practice using aerial photos now, so that you will be prepared to use them in combat.

Sergeant First Class John E. Foley is S-2 NCO of the 4th Battalion, 22d Infantry, 25th Infantry Division. He has served as a platoon sergeant in Ranger, airborne, light infantry, and mechanized infantry units. He has had several of his articles published in INFANTRY.

Squad Training
A Squad Leader's Thoughts

SERGEANT DON F. METTERS

To win in combat, an infantry unit must be proficient in its tactics and the employment of its weapons, and squad level is the place where it all starts. Many times, though, the collective or individual training of a squad is cancelled or reduced because of a lack of time or resources.

What can be done to improve squad training? First, all leaders must strive to develop a training plan that will enable a squad to build on the tasks it already knows, as well as to maintain its proficiency in those tasks. Any successful training plan must include a building block scheme to meet these goals, and the plan must start with the individual. Each squad member must be proficient at his job, from the squad leader on down to the last rifleman, or collective training will suffer.

There are many things to consider in developing a plan for squad training. The following are only a few of them:

- **What has the squad done recently in its training?** It doesn't make much sense to train a squad again this week on the same tasks as last week. If that training was done properly, the squad has already achieved proficiency at those tasks.
- **What is coming in the way of field time?** Knowing this, the chain of command can plan for squad training in the field to make the most of the available time and resources.
- **What tasks in the mission essential task list (METL) have not been worked on recently (or at all)?** Each unit's METL is different, of course, depending on its organization, but each METL is set up so that a particular unit's most likely missions are high on its list and the least likely are low on its list. But a squad should be trained even in its least likely missions.

To have an effective training plan, all leaders need to communicate ideas and information among themselves, both up and down the chain of command, so that the proper resources can be allocated for each task. One of the best ways to do this is to look at the method of training that is to be used in training each task.

BATTLE DRILLS

To establish a standard method of handling various situations, the Army has developed battle drills. A battle drill provides the basis on which a squad reacts to a given situation, and it is widely accepted that the *crawl, walk* and *run* method of training is the best way to teach a battle drill.

In the *crawl* phase, the squad leader may use a chalkboard or sand table to help his soldiers visualize a drill as he explains it. This phase of the training gives the soldiers the basic idea of how a particular drill works and what each individual's job is in that drill. It also prepares them for the next phase of training.

The *walk* phase is just that—a walk-through of the whole drill. This allows the soldiers to do the drill and still ask questions about it. It also allows the trainer to clear up any misunderstandings about the drill and its execution. Because this is the phase that really trains the squad in a drill, the walk-through should be done as many times as necessary to make the squad understand.

Once it is clear that the squad members understand the drill, it is time to put it all together in the *run* phase—a full-blown execution of the battle drill with no stops, no questions. The squad members go through the entire drill and at the end receive a critique of their performance. The critique should include the things they did right, the things they did wrong, and the ways in which they can improve upon their execution of the drill next time. The trainer, who now acts as the evaluator, needs to keep in mind that he is evaluating principle, not technique. So long as the squad adheres to the principles of the drill, the technique is secondary. Various techniques can be discussed, of course, and even incorporated into the drill so long as the principles are not altered.

The *run* phase should be as realistic as possible. The use of an opposing force (OPFOR), blank ammunition, and the MILES system, when they are available, is ideal for this purpose. Too, the terrain chosen should meet the needs of the drill and should be the most favorable on which to execute it. Once the squad achieves proficiency on this terrain, it will be better prepared to adapt the drill to other situations and other terrain.

When the squad is proficient in a number of drills, the complexity of its training should be increased. A good way to do this is to combine these drills into a situational training exercise (STX), which gives leaders a way to evaluate the squad's proficiency in a series of battle drills without all the planning and sup-

port required to set up an ARTEP.

An STX should be planned so that the battle drills relate logically to each other and flow easily from one drill to the next. Again, the use of a good OPFOR and the MILES system will contribute to realism. Even though an STX is not as comprehensive or complex as an ARTEP, it is an effective way for squad and platoon leaders to determine a squad's weak areas and plan to correct those weaknesses.

An STX can be more challenging if it is made into a live fire exercise, which is one of the best training sessions any squad can have. It not only includes the execution of battle drills, but also gives the squad members confidence in their weapons and in their ability to work as a team and win.

In bringing together the time and resources for quality training, planning is the key. One idea used in the 1st Armored Division in Europe was to dedicate one day a week to collective squad training. The hours from 0700 to 1200 were used to train each squad in the battle drills it needed to work on. Since this training was scheduled for the same day each week, it was easy for a company XO to plan the training and provide the necessary support.

The whole chain of command, however, had to work together. The squad leaders, platoon sergeant, and platoon leader, for example, would have a training meeting and plan the training for at least the following month and sometimes as far ahead as three months. They worked out every possible detail in these meetings, and since the training was a regular item on the schedule, the leaders could build upon each training session. Although some of the designated days had to be used for platoon training, most of them were devoted entirely to squad training.

Since the *crawl, walk,* and *run* method takes time, a squad could train in only one drill at a time on any given training day. After three or four of these sessions, though, one day was dedicated to an STX that combined all of this training. Even with FTXs, ARTEPs, and other commitments, a good 30 to 45 days of training could be done in a year. What commander would not grab at the opportunity to get that much squad training time?

This kind of scheduling may not work in every unit because of differing missions, but the idea of regular dedicated collective squad training time does have enough merit to warrant further study by all commanders, especially at the company and battalion level.

Battle is the ultimate test of a unit's training, and battles are won or lost at the small unit level. For anyone who is trying to form a winning unit, the squad is the place to start.

Sergeant Don F. Metters is a squad leader in Company B, 1st Battalion, 504th Infantry at Fort Bragg. He previously served in the 1st Battalion, 6th Infantry, 1st Armored Division in Germany.

A Physical Training SOP

CAPTAIN GREGORY T. BANNER

A high level of fitness is basic to the armed forces, especially to the soldiers in infantry units. Unfortunately, though, our PT on the whole is not very good and does not fulfill its purpose of keeping us in condition to go to war. In fact, in some units it barely sustains our soldiers at a minimum level of fitness.

One of the problems with PT is that it is not only boring but also fails to challenge our soldiers, many of whom want to be challenged and stressed. With some attention to these problems, PT can be made better.

The following, a portion of a PT SOP that I wrote for an infantry company, is offered in the hope that it will stimulate thought on the subject and lead other commanders to develop even better programs for their own units. The particulars of a program are secondary, though, to the principles of doing good PT, making it interesting, offering a little variety, and providing a forum for leadership development within a unit.

Company SOP for PT

General Procedures:

• *Each platoon will be responsible for the company's physical training for a week at a time. A rotating schedule will be kept by the first sergeant.*

• *The assigned platoon will be entirely responsible for conducting PT during its week. This includes establishing routes, setting the pace, coordinating all the required support and safety measures, and completely leading the PT session. This platoon will also lead the remedial PT session at the end of its week.*

• *The basic schedule is only a guide for the basic PT program; deviation is authorized and encouraged. The only requirement is that the PT be productive, challenging, and safe. Any changes to the basic schedule will be briefed to the company commander the preceding week and the necessary information will be posted*

Units should take advantage of opportunities to march to and from training areas.

by close of business Thursday of that week.

• Whenever possible, all exercises, formations, and commands will be according to Army regulations. PT sessions will be used as a forum to train soldiers and noncommissioned officers how to lead such formations properly. At the conclusion of every PT session, the first sergeant will critique the training.

• Organic platoons and squads are the basic units for PT formations. Under the direction of the platoon leading the PT, organic unit leaders will control their own personnel.

• PT will be completely cancelled only by the company commander. A weather decision will be made daily at 0600 by the leader of the controlling platoon. If rain or adverse conditions make the scheduled PT difficult to do, the platoon leader will decide whether the alternate PT plan will be put into effect. The alternate plan will consist of a rucksack march with the soldiers wearing rain gear, boots, helmet, load bearing equipment (LBE), and 60-pound rucksack over the regular PT uniform.

• The first sergeant will maintain the company's remedial PT list. Remedial PT is designed to give more exercise to the soldiers who need it; it will not under any circumstances be used for punishment. Platoon sergeants will enroll and disenroll soldiers from their platoons.

Weekly Schedule:

*• **Monday.** Calisthenics. Run a minimum of four miles. By the close of business Monday, the uniform and specific instructions for Thursday's PT will be posted next to the CQ desk.*

*• **Tuesday.** Rucksack march of at least eight miles. Uniform will be boots, LBE, rucksack containing 60 pounds.* (Infantrymen *must* march with rucksacks to stay in shape for walking. They must get their boots broken in and keep them in shape; they must have their LBE and rucksacks adjusted for hard and long walks. Aside from formal PT, units should take advantage of other opportunities to march with rucksacks—such as moving to and from training areas.)

*• **Wednesday.** Calisthenics. Run two miles at a seven-minute pace.*

*• **Thursday.** "Sports Spectacular." The platoon in charge will devise and organize a competitive or special athletic event. Anything is allowed as long as it is safe and is good PT.* (Suggested events are 100-pound rucksack races, buddy-carry races, squad or platoon relay races, log carries, guerrilla drills, litter races, and the like.)

*• **Friday.*** Calisthenics. Run a minimum of four miles.

*• **COB Friday.** Remedial PT. Calisthenics. Run a minimum of five miles at the pace of the slowest man.*

*• **COB Tuesday and Thursday.** Remedial swimming. A swimming instructional staff will be maintained at company level. Every soldier who cannot pass the quarterly swimming test will be enrolled in remedial swimming until he can pass the test. Anyone who cannot pass it will be considered non-deployable for any "real world" combat operation. For training purposes, however, platoons will make allowances for non-swimmers and weak swimmers in allowing them to train with their units.* (Soldiers should not graduate from basic training without being able to swim. Since they are allowed to report to their units in that condition, however, units must have swimming programs to bring them up to an acceptable level.)

As with all training, PT should be organized, well-thought-out, and should have specific goals. Most units, unfortunately, view it as something to get out of the way so that the "real" training day can begin. Some units, also unfortunately, do PT only to the level of their commanders, which usually does not make for a challenging program.

We can't afford to waste any of the time allotted to us, and we can't afford to have out-of-shape soldiers. It is the responsibility of the entire chain of command to develop and maintain a good PT program.

Captain Gregory T. Banner is a Special Forces officer now commanding his second Special Forces "A" detachment. Previous assignments as an infantryman include two tours in the 82d Airborne Division and an assignment as an instructor at the Northern Warfare School at Fort Greely, Alaska.

A Stay-Alive Checklist

LIEUTENANT THEODORE H. RHODES

The idea of trying to survive on the battlefield can be overwhelming. There is so much technology on today's battlefield and so much material to read—training manuals, field manuals, changes, updates, doctrine, messages, and professional manuals. Soldiers tend to view the subject of battlefield longevity as they do any other complicated concept—they accord such concepts a low priority while emphasizing training for common task and skill qualification tests. An individual soldier's focus, therefore, tends to be on the areas in which he is going to be evaluated.

Many soldiers, in fact, try not to think about battlefield longevity. Some think they will probably die anyway if they are sent to war. Others think battlefield longevity is something they can train for only on a live battlefield. Then they are overtaken by apathy, because they cannot see what they can do about it.

To counter this apathy, I have devised an easy five-point checklist for soldiers to memorize, a list that will help them monitor their longevity performance at any given moment when they are in the field. If they comply with all five checks, they will be doing everything within their own power to keep themselves alive. I call this checklist "the checks of five to stay alive."

Security. As fundamental as security is, it is still neglected occasionally, most often in patrol bases and assembly areas. Security really falls apart after a tough, all-night mission when there is a strong tendency to "go admin" for a while. Junior leaders must enforce tactical posture at all times.

Maintaining security means staying awake and being alert to any movement beyond the unit perimeter. When on patrol, it means keeping a 360-degree lookout. During movement, it means constantly looking around in all directions instead of at the ground or at the rucksack ahead.

Cover. This check has three subcategories—cover head, cover position, and cover route. To cover his head, a soldier must keep his kevlar helmet on at all times. When possible, he must position himself behind a tree, a berm, or a log and keep his head down.

A soldier must dig his individual fighting position immediately. To minimize digging, he should settle into a steep water cut if he can. The only times he does not dig in are at short halts, at objective rally points (ORPs), or when the mission calls for extreme stealth. An individual fighting position should be improved with overhead cover whenever there is time.

To cover his route, a soldier should use the terrain to his advantage, traveling inside gullies, ditches, and ravines, and moving behind berms, hills, and ridges. The basic rule is for a soldier to keep something that will stop bullets between him and the enemy. Concrete or masonry is best, of course, but 18 inches of wood, earth, or both will suffice.

Concealment. A soldier must understand the direct relationship between his ability to stay alive and his use of concealment. If a soldier stays concealed, he stays invisible to his enemy, and the odds of his staying alive greatly increase.

Like the cover check, the concealment check is also broken down into three subcategories—individual, stationary position, and route.

The most important piece of individual equipment to camouflage is the helmet. Every time I have been caught sneaking up on an objective, I have learned in the after-action review that I was identified by the distinctive outline of my helmet. If a soldier doesn't camouflage any other item of personal equipment, he should at least camouflage his helmet.

When in the defense, he should also camouflage his individual fighting position. A visible fighting position is worse than none at all. Noise, light, and litter discipline are important for static positions and even more important during movement, where stealth is crucial.

Moving through gulches, ditches, and ravines for cover will automatically conceal a route, and moving in the moonshadow at night can conceal a soldier's silhouette. Moving through vegetation, however, does cause noise. Soldiers can take advantage of any external noises in their immediate area to move rapidly. Strong wind gusts can also cover the sound of movement.

Dispersion. This simply means keeping the proper interval between individuals and elements during movements and at halts. Soldiers have a natural tendency to bunch up, and the more tired they get, the more they tend to bunch up. Sometimes they get so close together that one grenade could wipe out an entire platoon.

At night, the proper interval fluctuates, depending on the amount of moonlight and on the density of the foliage the soldiers are moving through. Each one should stay just close enough to maintain visual contact with the man in front, but not so far apart that they lose touch with the unit. It is up to each individual soldier to keep a proper interval between him and other soldiers in the formation.

During movements and at halts, junior leaders should make interval spot corrections. In patrol bases and assembly areas, these leaders dictate the rate of dispersion. We constantly preach cover and concealment, but usually do not give

dispersion the attention it deserves.

Fragmentation. Soldiers have to make the most of their fragmentation weapons such as hand grenades and claymores. They should always use these against an enemy at the farthest possible distance to keep him from discovering their own positions.

When they are attacking, if the enemy is too close for the supporting mortars to be called in, soldiers should lob a volley of M203 rounds on the objective before assaulting it. When they get closer, they can throw hand grenades. The goal is to pulverize the objective to the point that their assault will amount to little more than a bounding police call.

The fragmentation check, therefore, means thinking about how to engage the enemy with fragmentation weapons—claymores, grenades, and indirect fire—before trying to sneak up on him with an M16.

That's the list—security, cover, concealment, dispersion, and fragmentation. This five-item checklist is all soldiers need to monitor their tactical posture. It is a simple list that all soldiers can easily memorize. These "checks of five to stay alive" give soldiers the confidence they will need to face the reality of the battlefield.

Lieutenant Theodore H. Rhodes is assigned to the 1st Battalion, 14th Infantry, 25th Infantry Division in Hawaii. Commissioned through the Officer Candidate School in 1987, he previously served with the 1st Special Operations Command at Fort Bragg.

SWAP SHOP

Light infantry scouts are always in danger of being compromised with essential elements of information in their possession. And because they usually operate several kilometers forward of the battalion area of operations, they frequently find it difficult and time-consuming to get that information to their commanders or the tactical operations center (TOC).

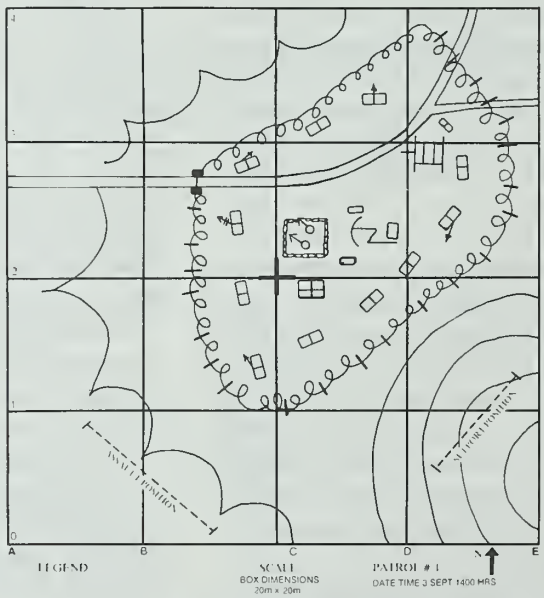
But their commanders must have the information as soon as they possibly can get it so that they can plan and execute their units' missions. While serving as a scout platoon leader in the 10th Mountain Division, and after corresponding with other scout platoons, our platoon perfected a working system that greatly improves upon the combat information process. All that is needed is a standard sketch format and FM secure communications.

Each member of the scout platoon (and of the S-2 section at the TOC) has a blank copy of the sketch format covered with acetate. The sketch format uses a simple grid reference system similar to that for locating a point on a military map. The scale of the sketch is determined by the size of the objective. Small objectives may have a grid box of 10 meters, larger objectives, 20 meters. Weapon systems, bunkers, vehicles, and the like are drawn to the approximate scale of the sketch.

After a thorough reconnaissance of the objective, the scout team or squad leader prepares his sketch on the blank form. Once the sketch is complete and oriented north, he transmits the message to the TOC using the grid reference system.

The squad leader describes the objective starting at the top of the sketch and working clockwise. If a bunker is located in the northern sector of the objective, for example, the squad leader transmits the location using the grid reference system. The orientation of the position is sent using the magnetic azimuth. For example, "an M60 fighting position is located in box C-3; right 7, up 4; oriented on an azimuth of 360 degrees." The TOC radio telephone operator finds the intersection of the lines C and 3. From there he reads right seven in the box and up four, just as in map reading. Then he draws to scale the symbol for an M60 oriented on an azimuth of 360 degrees.

By sending two points and the magnetic orientation, the squad leader can describe woodlines, roads, high ground, and obstacles. For instance, for an obstacle he would report, "a single strand of concertina wire running southwest to northeast



from C-3; right 3, up 2; runs to D-3; right 1, up 9." The squad leader continues this process until the entire sketch is complete. The TOC radio man's finished sketch should be as accurate as the squad leader's.

With practice, this system can be effective in getting the scouts' picture to the maneuver leader before his link-up with them. With this timely information, a commander can then plan and execute his combat missions more effectively.

(Submitted by Lieutenant Douglas M. Keepper, 2d Battalion, 22d Infantry, Fort Drum, New York.)

ENLISTED CAREER NOTES

DRILL SERGEANT SELECTION

Noncommissioned officers who would like to become drill sergeants have two options for selection: They may apply for entrance into the program or they may be nominated by their career branch.

Selection criteria for the program are listed in AR 614-200, Paragraph 8-17.

To be eligible to enter the Active Army Drill Sergeant Program, all candidates must meet the following non-waivable prerequisites:

- Be prepared to complete the Army Physical Readiness Test successfully shortly after arriving at Drill Sergeant School (AR 350-15 applies). *Volunteers* must have passed the APRT within the last six months and must furnish a copy of their physical fitness test score cards with their applications. Weight limits are prescribed in AR 600-9. The minimum physical profile guide for selection is 222221 without drill sergeant restrictive assignment limitations.
- Have no speech impediment.
- Display good military bearing.
- Have no record of emotional instability as determined by a screening of health records.
- Be a high school graduate or have GED equivalent.
- Have demonstrated leadership ability during previous tours of duty.
- Have no record of disciplinary action or time lost under 10 USC 972 during current enlistment or in the past three years, whichever is longer (includes an Article 15 filed on the restricted fiche).
- Have demonstrated the ability to perform in positions of increasing responsibility as a senior NCO in the Army, as reflected on NCO-ER.
- Have achieved a passing score on last Skill Qualification Test.
- Be serving in the ranks of sergeant through sergeant first class/platoon sergeant. Have a minimum of four years time in service; have successfully completed the Primary NCO Course or Primary Leadership Course, as appropriate; and, if in the rank of sergeant, must be recommended by a commander in the rank of lieutenant colonel or higher.
- Have not received an enlistment bonus or a selective reenlistment bonus for current service obligation if PMOS is not among those authorized for drill sergeant positions.

Noncommissioned officers who are stationed overseas and who would like to apply for the drill sergeant program should submit their applications with supporting documents 8 to 10 months before their DEROS (date eligible to return from overseas).

PINPOINT ASSIGNMENTS

All soldiers on assignment instructions to the U.S. Army, Europe (USAREUR) and Seventh Army receive pinpoint assignment instructions (PPAI). But these instructions are issued and received by different agencies at different times, depending upon a soldier's skill level.

The United States Army 1st Personnel Command furnishes PPAI as follows:

Skill Level 1. Upon a soldier's arrival in USAREUR.

Skill Levels 2, 3, and 4. To the losing military personnel office (MILPO) during the fifth month before the month in which the soldier is scheduled to arrive in USAREUR, or within 20 working days of the date of the appropriate Enlisted Distribution Assignment System (EDAS) cycle.

Skill Level 5. To the losing MILPO through the U.S. Total Army Personnel Command (PersCom) concurrent with the appropriate EDAS cycle.

Additional information is available in AR 614-200, Selection of Enlisted Soldiers for Training and Assignment, and DA Pamphlet 600-8-10. Both publications are available for review at local personnel action centers (PACs).

ROTC INSTRUCTOR POSITIONS

The Combat Arms Career Division, Enlisted Personnel Management Directorate, is looking for senior NCOs to fill ROTC instructor positions in all four of the ROTC regions.

Applicants should have served successfully as either drill sergeants, platoon sergeants, or first sergeants. Additionally, the Cadet Command would prefer that they be graduates of the U.S. Army Sergeants Major Academy, but this is not mandatory. All NCOs assigned to ROTC duty must also meet the Army's physical fitness and weight standards.

Interested combat arms NCOs should contact their respective career branches at PersCom to initiate the application process.

EFMP ENROLLMENT IS MANDATORY

Some soldiers with family members who have exceptional medical problems and who are not enrolled in the Exceptional Family Member Program (EFMP) are running into problems. As these soldiers receive assignment instructions for overseas and apply for family travel, some of these requests are being disapproved because the gaining unit does not have the proper facilities to care for these family members.

Faced with the prospect of a two-year family separation, these soldiers are calling PersCom to request changes to their assignments. Deletions and deferments from assignment instructions will not be granted, however, *solely* for the purpose of enrollment in the EFMP.

Effective 1 August 1986, all soldiers

with assignment instructions to overseas areas were ordered to have their family members medically and educationally screened and, if required, enrolled in the program.

It is to the advantage of a soldier and his family to enroll in the EFMP before receiving assignment instructions. When a soldier who is enrolled in the EFMP is nominated for assignment, PersCom will coordinate with the gaining command to determine whether services are available where a valid personnel requirement exists. When services are not available. PersCom may consider alternate assignments based upon existing assignment priorities.

Decisions for family travel outside the continental United States (OCONUS) will not be finalized for soldiers who indicate on DA Form 4787 (Reassignment Processing) that their family members require special services unless they are enrolled in the program or complete and forward EFMP information to the gaining OCONUS command.

Soldiers enroll through their local Army medical treatment facilities. Questionaires (DA Form 5291-R series) or Functional Medical Summary Sheets (FMSSs) are completed by the sponsors and verified by the attending medical or educational specialists. The questionnaires or FMSSs are forwarded to the regional EFMP coding team who convert the information to coded booklets and forward the booklets to PersCom. Enrollment in the program is now mandatory and must be revalidated every three years.

EFMP information is not maintained in local or DA level files that are viewed by promotion or school selection boards.

FROM ACTIVE TO RESERVE COMPONENT

The training a soldier receives while on active duty will have a positive effect upon his training when he makes a transition to the Reserve Components (the National Guard and the U.S. Army Reserve).

Training is the top priority of the Total Army, and training in the Reserve Components is much like that found in the Active Army. There are some differences, however, in the way the training is carried out.

RC commanders face constraints on time, training areas, and equipment. RC units usually meet for 12 weekends a year at a local armory or Reserve Center and perform two weeks of annual training. Few RC facilities are located near outdoor training areas, and weekend drill time is often used to improve individual skill proficiency and to conduct limited small unit collective training.

During its two-week active training time, an RC unit conducts collective training with the emphasis on hands-on activity. This two-week period is normally conducted at an Active Army installation, a regional training site, or an overseas area. During this period, the units participate in large unit field training exercises (FTXs). RC support elements provide support, in some cases augmenting or even replacing their Active Army counterparts.

Today, more than ever before, the Army Reserve and Army National Guard are being counted upon to accomplish the many missions that will be assigned to them in the event of mobilization.

PHYSICAL FITNESS AND THE NCO-ER

A number of questions have been asked regarding the evaluation of physical fitness on the new NCO-ER. The following pointers should help clear up some of these problems:

The NCO responsibility of Physical Fitness and Military Bearing includes a number of interrelated components. Physical fitness, only one factor of total fitness, is the physical ability to accomplish the mission—combat readiness. Military bearing consists of posture, dress, overall appearance, and manner of physical movement.

The Army Physical Fitness Test (APFT) measures the basic components of physical fitness and evaluates a soldier's ability to perform physical tasks.

Ratings of "Excellence" based solely on the rated NCO's performance on the APFT must be justified with a bulleted example that reflects a score of 290 or higher (290 is the DA standard for excellence on the APFT).

Ratings of "Excellence" based on performance other than the APFT—such as significant achievement in sports or recognition based on military bearing—must be justified by bulleted examples that reflect excellence in those particular areas. The rated NCO must first and foremost meet the Army standards for the APFT.

Ratings of "Excellence" based on the performance of the rated NCO's subordinates must be justified by bulleted examples that reflect the rated NCO's direct influence on such performance.

Bulleted examples of excellence reflecting the rated NCO's leadership in this regard, however, may be more appropriate under the NCO responsibilities of "Leadership" or "Training."

REENLISTMENT ELIGIBILITY FOR ALIEN SOLDIERS

The Army's new policy concerning the reenlistment eligibility of alien soldiers includes the following key features:

- Aliens now serving in the Active Army or the Reserve Components will not be eligible to reenlist after they have seven years of military service.

As an exception, alien soldiers who enlisted before 1 January 1986 may extend or reenlist. But their expiration of term of service (ETS) dates cannot go beyond 31 December 1992 unless they become U.S. citizens.

- Prior-service aliens who want to enlist in the Army National Guard or Army Reserve will not be eligible to enlist if their total terms of military service add up to more than seven years at the time of enlistment.
- Aliens who have more than seven years of military service and who want to reenlist will be permitted to extend their current enlistments for periods not longer than 12 months, if they can show proof that they have filed for citizenship and are waiting for court dates.

These restrictions do not apply to soldiers from the Federal States of Micronesia or the Republic of the Marshall Islands.

OFFICERS CAREER NOTES

IOBC-RC

The Infantry Officers Basic Course, Reserve Component (IOBC-RC) is designed to provide branch qualification for Reserve Component infantry lieutenants. The eight-week course is oriented toward hands-on field training in combat critical infantry skills.

Following this active duty for training, officers must complete the 120-hour IOBC-RC Correspondence Course in order to become branch qualified.

This year's IOBC-RC class is scheduled for 25 June to 21 August 1989.

Further information is available from Captain Dave Taggart, AUTOVON 835-2783/4052 or from Commandant, U.S. Army Infantry School, ATTN: ATSH-I-V-C-O, Fort Benning, GA 31905-5593.

WEST POINT MASTER'S DEGREE PROGRAM

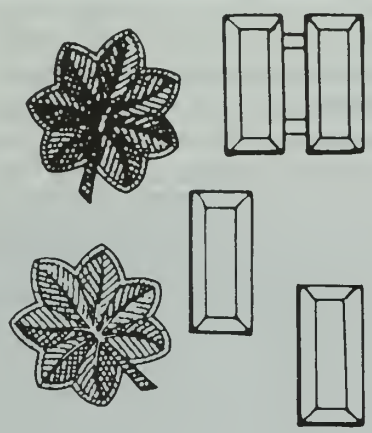
The Behavioral Sciences and Leadership Department in conjunction with the Corps of Cadets, United States Military Academy, recently implemented a new master's degree program. It is called the West Point Fellowship in Leader Development (WPFILD).

This program will allow a tactical officer to get a master's degree in leader development during the first year of his 48-month USMA stabilization. This means that an officer will spend only four years getting his degree and completing the utilization tour instead of the normal five years.

The WPFILD is a two-year program. The first year is entirely academic. An officer attends classes at West Point in pursuit of his advanced degree, and all academic requirements must be completed during this year.

The second year is a practicum in which the officer is assigned as a tactical officer and performs all the duties of the job. The officer receives a master of arts degree in leader development at the end of the second year and then completes the remaining two years of this tour as a tactical officer.

The basic qualifications for this program remain the same as those for other USMA instructor positions. An officer must have an outstanding file, a minimum grade point average of 3.0 in undergraduate work, and a minimum combined quantitative/verbal score of 1200 on the Graduate Record Examination.



Addition information is available from CPT Barclay at Infantry Branch—AUTOVON 221-5520/5973.

OAC UPDATE

Since the amount of active federal commissioned service required for promotion to captain has increased from 48 months to 53 months, advanced course attendance has slowed.

In general, officers are now scheduled for the IOAC class most closely preceding their expected promotion to captain. As a rule of thumb, the following time on station (TOS) guidelines will apply:

ASSIGNED TO	TOS BEFORE IOAC
CONUS	40-42 months
CONUS (w/ prior overseas tour of 12 months or more)	30-36 months
Alaska or Hawaii	42 months
USAREUR	36 months
Panama	30 months

Lieutenants in USAREUR and Panama should consider extending their foreign service tours to reduce the time between their DEROS (date eligible to return from overseas) and their promotion to captain.

The Army is testing a program that would allow officers on orders to an advanced course to leave their dependents at their current duty stations or to relocate them to their follow-on assignments instead of moving them to the advanced course location. This program is voluntary and applies only to officers with CONUS follow-on assignments. Local military personnel offices have the details.

HINTS FOR OFFICIAL PHOTOGRAPHS

The role of official photographs in the centralized selection process cannot be overstated.

Board members look for a current photograph whose date matches the date of the officer's latest officer record brief. Missing or out-of-date photographs indicate to the board that the officer either is not concerned about selection or is trying to hide something.

Here are a few simple hints for presenting yourself positively:

- Make sure your uniform is neat and wrinkle-free.
- Make sure it displays all of your permanently authorized decorations properly.
- Wear the shoulder patch and unit insignia of your current unit.
- If you have a mustache, either trim

it exactly as allowed in regulation or shave it off.

• Have an impartial, experienced person view your photograph before submitting it to PersCom.

• Send at least two copies to TAPC-MSE-R, Alexandria, VA 22332-0442.

FA DESIGNATION YEAR GROUP 1982

Functional areas for year group 1982 infantry officers were designated in September 1988. This year group consisted of 508 captains who had dates of rank ranging from 1 June 1985 to 1 September 1986.

Each officer was evaluated on his manner of performance and his compatibility with each functional area that was open to infantry officers. The compatibility evaluation was based primarily upon four criteria—preference, military training, grade point average, and academic discipline. For Functional Areas 39 (Psychological Operations and Civil Affairs) and 48 (Foreign Area Officer), language aptitude was included as an additional criterion. Each functional area proponent assigned a weight factor to each criterion, and a compatibility score was computed.

The functional area assigned to each officer was not derived solely from this compatibility score. Rather, the score was matched against the distribution targets established by the branch proponent. Thus, the most qualified officers were selected. The statistical results of the designation are available in Tables 1 and 2.

An analysis of the functional area designation for Year Group 1982 infantry officers yielded several conclusions that should be noted:

First, too many officers are not given a chance to express their desires because they have not sent their preferences to Infantry Branch for consideration.

As Table 2 illustrates, a vast majority of the officers who submitted preferences were designated in one of their preferred areas.

Second, too many infantry officers are listing preferences that are wholly incompatible with their backgrounds. For example, an officer who scored 65 on the Defense Language Aptitude Test (DLAT) is wasting a preference if he lists FA 48 or 39 because a score of 89 is the minimum for entry into either of these functional areas.

Likewise, officers with demonstrated proficiency (academic grade point average and discipline) in technical fields such as automation or engineering may waste their preferences if they list non-technical areas such as 41 (Personnel Management) or 54 (Operations) or if they entirely exclude the functional areas in which they are proficient.

Third, far too many officers are requesting designation into FAs 41 or 54 in the belief that these areas will keep them "closer to troops" or "more competitive for promotion." These beliefs are wholly untrue. The key difference between these two "traditional" functional areas and the others is that these two are very limited fields that are heavily overpopulated. For that reason, they may never afford an officer any functional area experience. Additionally, the potential for an officer to be promoted as an FA 41 or an FA 54 is actually less than his potential to be selected from most other functional areas.

OVERALL FAD RESULTS

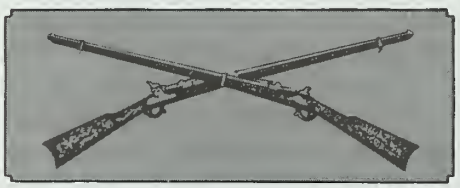
FUNCTIONAL AREA	BRANCH TARGET	NUMBER DESIGNATED
48	42	42
52	11	11
49	55	55
53	48	48
51	40	40
45	25	25
97	38	38
46	33	33
39	15	15
50	15	15
54	119	119
41	67	67
TOTAL	508	508
SINGLE TRACK	0	0

Table 1

PREFERENCE MATCH-UP

FUNCTIONAL AREA	PREFERENCE 1st	2d	3d	4th	NO MATCH	NO PREF
48	26	4	3	1	0	8
52	1	0	4	3	1	2
49	19	17	3	4	2	10
53	7	11	3	6	2	19
51	14	19	3	3	0	1
45	10	3	1	0	1	10
97	20	11	4	2	0	1
46	5	8	6	0	1	13
39	12	3	0	0	0	0
50	3	9	3	0	0	0
54	64	20	2	2	1	30
41	9	1	0	0	3	54
TOTAL	190	106	32	21	11	148
SINGLE TRACK	0	0	0	0	0	0

Table 2



BOOK REVIEWS

As we mentioned in our last issue, we have received a large number of publications for review during the past few months. We mentioned a few of them in that issue; here are more:

• AMERICAN MILITARY POLICY IN SMALL WARS: THE CASE OF EL SALVADOR. By A.J. Bacevich, James D. Hallums, Richard H. White, and Thomas F. Young. A Special Report of the Institute for Foreign Policy Analysis, Incorporated (Pergamon-Brassey's, 1988. 58 Pages. $9.95, Softbound). This is a publication that all U.S. Infantrymen should read and study. It was prepared by four serving U.S. Army officers for the Kennedy School of Government, Harvard University, where they served during the 1987-1988 academic year as National Security Fellows.

In their report, the authors criticize U.S. military policy as it was developed for and practiced in El Salvador between 1979 and 1987, and hold little hope for any real improvement in the future. More, they believe that the U.S. military establishment does not know how to fight "small wars" and "that achieving success in small wars necessitates a drastic revision of American priorities at least as far as the theater of war is concerned."

They have talked with numerous members of the U.S. and Salvadoran military forces as well as U.S. Foreign Service officers and AID officials who had served in El Salvador. They also visited that country for a first-hand look in October 1987.

They offer us a lot of things to think about, and we hope their report will receive serious consideration by all who are concerned with armed interventions, small wars, and counterinsurgency operations.

• ADVICE AND SUPPORT: THE FINAL YEARS, 1965-1973. By Jeffrey J. Clarke. The Fourth Volume in the United States Army In Vietnam Series (Superintendent of Documents, 1988. S/N 008-029-00158-6. 561 Pages. $21.00, Softbound). Although there is a five-year gap between the events of this volume and those described by Ronald H. Spector in his 1983 book in the same series—ADVICE AND SUPPORT: THE EARLY YEARS OF THE U.S. ARMY IN VIETNAM, 1941-1960—little changed in the U.S. approach to the war in Vietnam. From the beginning of active U.S. participation in Vietnam in mid-1954 to the U.S. withdrawal 20 years later, U.S. leaders continually tried to remodel the South Vietnamese political structure and military services so that they would mirror those of the United States.

The effort was doomed to failure, for those leaders failed to heed the dictum that, as the author of this volume puts it, it is "beyond the capacity of one power to reform and reshape the society of another." Throughout the years, senior U.S. leaders refused to believe the disturbing reports of Vietnamese ineffectiveness that were passed up the chain of command by U.S. advisers in the field; they preferred to believe the questionable statistics given to them from other sources, and continued to press policies on their subordinates in the belief that what they were doing in Vietnam was the right thing and would eventually succeed.

Jeffrey Clarke, a historian with the Army's Center of Military History, has done a fine job in putting together this history from a variety of sources, including numerous interviews with former advisers at all levels. It is another book that should be read and studied by all U.S. infantrymen.

• HAMBURGER HILL, MAY 11-20, 1969. By Samuel Zaffiri (Presidio, 1988. 304 Pages. $18.95). In many ways this is a difficult as well as disappointing book to read. It is more the highly personal account of a nine-day battle fought in the A Shau valley of South Vietnam by one U.S. infantry battalion—the 3d Battalion, 187th Infantry—in May 1969. More particularly, the main focus of the book seems to be on the words and actions of the battalion's commander, Lieutenant Colonel Weldon Honeycutt.

Because the author does use personal accounts of the action, the reader is subjected to a lot of blood and gore. Soldiers are not just wounded, they are blown apart; arms and legs litter the battle areas. Many things are left unsaid or lost in transition because the author loses control of his narrative about a third of the way into it and lets the reader flounder on the side of the mountain or in the notorious draw he keeps mentioning. At times, it seems there are more men coming down the mountain than there are going up. A platoon leader is described in vigorous terms as he stands near a tree firing a grenade launcher at the enemy just above him; we never hear of him again.

Every soldier whose name is mentioned in this book and who is still living will want a copy. But those readers who want to know exactly how U.S. infantry battalions fought their individual battles in Vietnam will find little to interest them.

• AMERICANS AT WAR, 1975-1986: AN ERA OF VIOLENT PEACE. By Daniel P. Bolger (Presidio, 1988. 466 Pages. $24.95). For the United States, the Vietnam War ended on 30 April 1975. Between then and 15 April 1986, the U.S. conducted seven of what the author, a serving U.S. Army officer, refers to an "expeditionary actions"—the recovery of the SS *Mayaguez* and its crew; the raid into Iran; the Marine deployment into Lebanon; the Grenada campaign; operations against Libya; and the interception of the *Archille Lauro* hijackers. He does not believe the U.S. news media adequately covered those actions, not because of media bias but because of the lack of "an articulate understanding of how armed forces really

work.'' His book is intended to set the record straight.

Unfortunately, while the author is a trained historian, his writing—often overblown and filled with needless descriptions of sunsets and sunrises—belies that training. In at least two of the actions—the Iran raid and Lebanon—he allows himself to be carried away with an all too apparent dislike for certain of the military commanders. In at least one other—Grenada—he is not critical enough.

The book does have some value if only because the author does offer accounts ''fuller than most.'' It is too bad he could not back away from his material long enough to see the forest instead of the trees.

• THE UNITED STATES INFANTRY: AN ILLUSTRATED HISTORY, 1775-1918. By Gregory J.W. Urwin. Color illustrations by Darby Erd (Sterling, 1988. 176 Pages. $24.95). This is not really a history of the U.S. Infantry, although the color illustrations and photographs do depict the uniforms worn and the weapons and equipment used by the infantry during the years it covers. It is more a brief history of the United States Army from its beginnings during the colonial wars to the end of World War I. In that respect, it follows the general outline adopted by the late T. Harry Williams in his 1981 publication titled THE HISTORY OF AMERICAN WARS FROM COLONIAL TIMES TO WORLD WAR I, a book that is not listed in the author's bibliography.

As such, and considering the value of the illustrations and photographs to the narrative, this book can be classed as a useful reference tool for anyone interested in the Army's history.

• U.S. ARMY CLOTH INSIGNIA, 1941 TO THE PRESENT: AN ILLUSTRATED REFERENCE GUIDE FOR COLLECTORS. By Brian L. Davis (Sterling, 1987. 70 Pages. $14.95). This book is exactly what the title says it is—an illustrated guide for collectors, complete with a pricing guide that was current at the time the book was prepared. It contains more than 700 black-and-white illustrations of shoulder sleeve insignia, pocket patches, and beret flashes. The author's introduction is most interesting and informative, as is his list of other publications for further reading.

• SOLDAT, THE WORLD WAR II GERMAN ARMY COMBAT UNIFORM COLLECTOR'S HANDBOOK: EQUIPPING THE GERMAN ARMY FOOT SOLDIER IN EUROPE, 1943, by Cyrus A. Lee (Pictorial Histories Publishing Company, 713 South Third Street West, Missoula, Montana 59801. 1988. 88 Pages. $7.95, Softbound). Here is another collector's item, the first in a planned three-volume series that will cover the period from 1939-1945. Each of the book's four major chapters is devoted to a special area—uniforms, equipment, weapons, and miscellaneous items such as signal equipment, documents needed by the individual soldier, and identification discs. The author also includes an index and a selected bibliography.

• SMALL ARMS TODAY, 2d EDITION. By Edward C. Ezell (Stackpole Books, 1988. 480 Pages. $19.95, Softbound). This up-dated edition of a most useful reference book was put together by a well-known small arms expert who has authored numerous other weapon books and currently serves as the Supervisor of the Division of Armed Forces History of the Smithsonian Institution. The book lists the types of small arms in use today in every country of the world, traces the movement of small arms throughout the world, presents information on weapons used by guerrillas and terrorists, and contains more than 100 photographs and line drawings of particular weapons.

The weapon entries are located by countries listed alphabetically and are arranged by category—handguns, submachineguns, rifles, shotguns, machineguns and automatic cannon. Two types of identification numbers are used—NSN (NATO stock numbers) and FOM (Foreign Materiel Numbers). The last section discusses developments in small arms ammunition since 1939. The book also has an index and a selected bibliography.

Here are a number of other reviews:

JANE'S ARMOURED FIGHTING VEHICLE SYSTEMS, 1988-89. First Edition. Edited by Tony Cullen and Christopher F. Foss (Jane's, 1988. 480 Pages.)

Much of the information in this book, the first in a new series, formerly appeared in other volumes in the Jane yearbook group. Because of the growing importance of armored vehicles on the battlefield, and the fact that a growing number of countries are now developing their own vehicles, the publisher decided to group certain information about armored fighting vehicles so that it would be more easily accessible to the user. It contains a number of key sections such as AFV armament, AFV ammunition, vehicle protection, engines, transmissions and powerpacks, mobility, turrets and cupolas, and optics. The book also has an addenda and a detailed index.

This is an outstanding addition to the Jane's yearbook series.

LIDDELL HART AND THE WEIGHT OF HISTORY, by John J. Mearsheimer (Cornell University Press, 1988. 234 Pages. $24.95). Reviewed by Captain Harold E. Raugh, Jr., United States Army.

Captain Sir Basil Liddell Hart is considered by many to be the foremost military theoretician and historian of the 20th century, and has been lauded as ''The Captain Who Taught Generals.'' He prided himself on being the archfoe of appeasement, the brain behind the blitzkrieg, and the mentor of Guderian and Rommel.

The author of this book, a professor of political science at the University of Chicago who has previously published works on contemporary military strategy, recounts the evolution of Liddell Hart's military thought as shown in his writings. Through scrupulous research and a dissection of Liddell Hart's arguments, including an incisive analysis of his voluminous correspondence, Mearsheimer shows convincingly that Liddell Hart manipulated facts and distorted history to resurrect a reputation that had been tarnished by the events of World War II.

Early in his career, Liddell Hart believed that the followers of Clausewitz—''the Mahdi of mass and mutual massacre''—were responsible for the bloody stalemate that characterized

World War I. He further thought of himself as "the source of wisdom who would counteract Clausewitz's bad ideas."

In the 1920s and 1930s, Liddell Hart did favor mechanization and the tank, though his interest vacillated. He wrote basically nothing about the "indirect approach" between 1933 and 1940, and little about the blitzkrieg. He was against the British "continental commitment," and after Hitler dismembered Czechoslovakia in March 1939 and British policy shifted away from appeasement, Liddell Hart "opposed this shift and argued forcefully for further appeasement."

France's fall in 1940 badly damaged Liddell Hart's reputation. After the war, he consciously used a number of methods, including "selfish manipulation of the historical records," in an attempt to regain his lost prestige. Mearsheimer's most damaging revelation may be the one that shows Liddell Hart used the German generals to his personal advantage. His 1948 book, *The German Generals Talk,* is but one example of how, the author says, Liddell Hart and the generals polished "up each other's soiled reputations for mutual benefit."

This impeccably documented, myth-shattering, and enthralling book cannot be recommended too highly, not only to soldiers and historians but also to those who want to learn how history has been manipulated in the past and how such manipulation might be prevented in the future.

NAPOLEON'S INVASION OF RUSSIA, by George F. Nafziger (Presidio, 1988. 641 Pages. $45.00). Reviewed by Lieutenant Colonel John C. Spence III, United States Army Reserve.

As one reads accounts of Adolf Hitler's planning for and executing his Operation *Barbarossa,* there is a distinct sense of deja vu. On 21 June 1941, the German Army invaded the Soviet Union. On 23 June 1812, leading elements of Napoleon's *Grand Armee* reached the Niemen River, which separated the Grand Duchy of Warsaw and Russia. Cold, hunger, and inattention to sound logistical principles contributed to the defeat of each army.

Historians and students of the Napoleonic period will appreciate this highly detailed account of one of the most disastrous campaigns ever conducted by French military forces. The retreat from Moscow must rank with such French humiliations as the capitulation in 1940 and the defeat at Dienbienphu in 1954.

Nafziger, a specialist in Napoleonic military strategy, provides the reader with an overview of the balance of forces in Europe in 1812, as well as a detailed analysis of France's own military forces and Allied resources. Of significant value is an almost complete order of battle of the French and Allied forces from 1810 to 1812, as well as one for the Tsarist forces. His research into obscure archival material has yielded a wealth of factual information, and his book can be profitably used as a casebook study of the Russian campaign.

MISSILE DEFENSES AND WESTERN EUROPEAN SECURITY: NATO STRATEGY, ARMS CONTROL, AND DETERRENCE. By Robert M. Soofer. Contributions in Military Studies Number 81 (Greenwood Press, 1988. 174 Pages.) Reviewed by Captain Stephen A. Johnson, United States Army.

Since President Ronald Reagan's March 1983 announcement of the Strategic Defense Initiative (SDI), Western Europe's concerns over the U.S. commitment to the defense of Europe have intensified. Robert Soofer, an instructor at Georgetown University and a national defense analyst for the U.S. Senate Republican Policy Committee, analyzes the arguments against SDI advanced by certain Western European countries to determine whether strategic and tactical missile defenses actually lessen or increase their security.

After providing a historical perspective by discussing European attitudes regarding missile defenses during the ABM controversy of the late 1960s and early 1970s, Soofer shows that the Western European perspective of deterrence is not based on conventional defense but on nuclear escalation. He then points out that the Western European view of SDI, as it applies to their idea of deterrence, should have been expected.

The strength of this book lies in its explanation of the Western European views of SDI and the author's analysis that points out how SDI would improve the U.S. commitment to NATO and would not, as many Western Europeans fear, cause a "decoupling" of the U.S. from NATO.

It is recommended for any reader interested in international relations, strategic studies, or diplomacy.

TO RAISE AN ARMY: THE DRAFT COMES TO MODERN AMERICA. By John Whiteclay Chambers II (Free Press, 1987. 386 Pages. $24.95). Reviewed by Command Sergeant Major John W. Cooper, United States Army Reserve.

The author, an associate professor of history at Rutgers University, has actually written two books in one. His major focus is on the evolution, implementation, and effects of the selective service draft during World War I. He argues that President Woodrow Wilson's political fears of Theodore Roosevelt's being selected to head a division of volunteers led him to drop his objection to the draft. In short, Wilson was so concerned about losing the ability to direct the war that he was willing to set aside his preference for the traditional volunteer army of citizen soldiers in favor of conscription.

The author also discusses the struggle over classification and exemptions as well as the criticisms of the system from people who were concerned with discrimination against blacks, the exclusion of non-resident aliens, the drafting of the rich, and the lack of officers from the lower socio-economic classes.

This analysis is set within a larger context, as Professor Chambers includes a four-chapter essay on the various military formats that have been used in the history of our country. He concludes this second phase of the book by examining today's all-volunteer force and possible alternatives. Throughout, he argues that the type of military format used in a particular era reflects the political and social culture of the nation at the time as well as the attitudes of its political leaders

toward the role of the U.S. in world affairs.

This is a very readable, extensively documented study of conscription and our experience with it in World War I. It should interest students of that war and of the Progressive Era. More important, it should appeal to anyone concerned with the way the U.S. raises its military forces in both war and peace.

AIR POWER AND THE GROUND WAR IN VIETNAM. By Donald J. Mrozek (Air University Press, 1988. 196 Pages. $9.00). Reviewed by Lieutenant Colonel Jack Mudie, United States Air Force Retired.

Dr. Donald Mrozek, a professor of history at Kansas State University, acknowledges in his introduction that his study is a limited one in that it centers on expectations instead of the actual effect of air power on the ground war in Vietnam. He mentions only in passing such important operations as Linebacker II, the so-called 1972 Christmas bombing campaign against Hanoi and Haiphong that received much credit for the "peace" agreement that North Vietnam finally signed after years of stalling and subterfuge.

As such, the book stays within the author's self-imposed boundaries in discussing innovations such as the use of sensors to detect southbound traffic on the Ho Chi Minh trail, the development of C-47 and C-130 gunships as close support aircraft, and the adaption of the B-52 bomber to missions against tactical targets.

Neither these nor other novel operations were without their inter- or even intra-service opponents, and Mrozek's underlying theme is that the war was a struggle of rigidity versus vacillation. With the apparent lack of clear-cut goals further exacerbated by inter-service rivalry and civilian overcontrol of routine military operations, Pogo's observation that "the enemy is us" seems an appropriate epitaph for our application of air power in Vietnam.

While the book is interesting to read as history—although not easy to read—its usefulness to professional military men is quite limited, except in its recognition of the need for a truly unified goal-oriented effort by all of the services. We expect to learn from the errors of previous wars, but we certainly did not apply the strategic lessons of World War II to the Korean War. And the failure of air interdiction by tactical air power in Korea—where only one out of every 14 southbound North Korean trucks was destroyed—was evidently forgotten in our futile effort to block the Ho Chi Minh trail strictly by air.

Mrozek's closing comment probably says it all: "The enduring pertinence of the Vietnam conflict rests not in what it prescribes about Asia, nor in what it prescribes about combat techniques and preparedness, but in what it says about ourselves."

POSTWAR INDOCHINA: OLD ENEMIES AND NEW ALLIES. Edited by Joseph J. Zasloff (Foreign Service Institute, U.S. Department of State, 1988. 290 Pages. $9.00, Softbound). Reviewed by Doctor Joe P. Dunn, Converse College.

The 11 chapters in this publication are divided into two parts—Vietnam and Indochina, and External Relations of Indochina States. They are the product of a 1986 State Department conference. The essays are by leading experts in the field, but they are all rather basic and most are frankly disappointing.

None of the following themes, which the editor draws from the chapters, will surprise anyone:

- Vietnam today is the indisputable hegemonic power in Indochina.
- Vietnam is not likely to employ an Indochinese Federation to maintain its continued dominance.
- While there has been little objection to Vietnam's control of Laos, there is stiff resistance against its occupation of Cambodia.
- China is Vietnam's primary adversary in Cambodia, and the Soviet Union is Vietnam's principal ally and supplier of military and economic assistance.
- The U.S. has adopted a low profile policy in Indochina, thereby allowing ASEAN to take the lead.

While scholars will find relatively little of interest in the volume, novices will find it a good introduction to contemporary Indochina.

RECENT AND RECOMMENDED

THE OTHER ITALY: ITALIAN RESISTANCE IN WORLD WAR II. By Maria de Blasio Wilhelm. W.W. Norton, 1988. 197 Pages. $18.95.

THE DEADLY EMBRACE: HITLER, STALIN, AND THE NAZI-SOVIET PACT, 1939-1941. By Anthony Read and David Fisher. W.W. Norton, 1988. 675 Pages. $25.00.

JACK NORTHROP AND THE FLYING WING: THE REAL STORY BEHIND THE STEALTH BOMBER. By Ted Coleman, with Robert Wenkam. Paragon House, 1988. 284 Pages. $24.95.

AMERICA 1941: A NATION AT THE CROSSROADS. By Ross Gregory. Free Press, 1989. 339 Pages. $22.95.

DESIGNED TO KILL: THE HISTORY OF BRITISH BOMB DISPOSAL. By Arthur Hogben. Sterling, 1987. 272 Pages. $24.95.

617 SQUADRON: THE DAMBUSTERS AT WAR. By Tom Bennett. First published in 1986. Sterling, 1987. 272 Pages. $12.95, Softbound.

THE TYPHOON AND TEMPEST STORY. By Chris Thomas and Christopher Shores. Sterling, 1988. 224 Pages. $49.95.

THE AEGEAN MISSION: ALLIED OPERATIONS IN THE DODECANESE, 1943. By Jeffrey Holland. Greenwood Press, 1988. 190 Pages. $37.95.

HITLER'S PANZERS: THE YEARS OF AGGRESSION. By Bryan Perrett. Tanks Illustrated Number 27. Sterling, 1987. 64 Pages. $9.95, Softbound.

ENCYCLOPEDIA OF THE THIRD REICH. By Louis L. Snyder. A reprint of the 1976 edition. Paragon House, 1988. 410 Pages. 16.95, Softbound.

IN GOOD COMPANY: ONE MAN'S WAR IN VIETNAM. By Gary McKay. Allen and Unwin, 1987. 197 Pages. $34.95.

THE RENAULT FT LIGHT TANK. By Steven J. Zaloga. Color Plates by Peter Sarson. Vanguard Series 46. Osprey, 1988. 48 Pages. Softbound.

THE CRUSADES. By David Nicolle. Color plates by Richard Hook. Elite Series 19. Osprey, 1988. 64 Pages. Softbound.

F-4 PHANTOM, VOLUME II. By Robert C. Stern. Warbirds Illustrated 46. Sterling, 1987. 72 Pages. $9.95, Softbound.

BRITISH CRUISERS IN WORLD WAR ONE. By R.A. Burt. Warships Illustrated 12. Sterling, 1987. 64 Pages. $9.95, Softbound.

THE COMMANDOS: WORLD WAR TWO TO THE PRESENT. By Derek Oakley. Uniforms Illustrated Number 20. Sterling, 1987. 72 Pages. $9.95, Softbound.

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F-104 STARFIGHTER. By Peter R. Foster. Warbirds Illustrated Number 46. Sterling, 1987. 64 Pages. $12.95.

THE AIRGUN BOOK. By John Walter. Fourth Edition. Sterling, 1987. 160 Pages. $29.95.

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From The Editor

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